

Fig. 1C

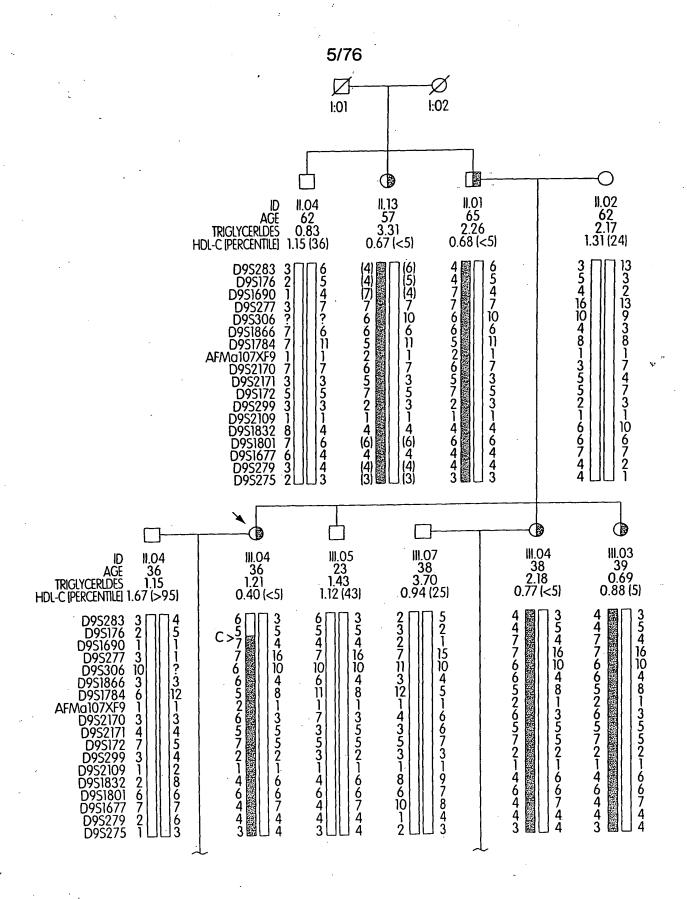


Figure 2A - (1)

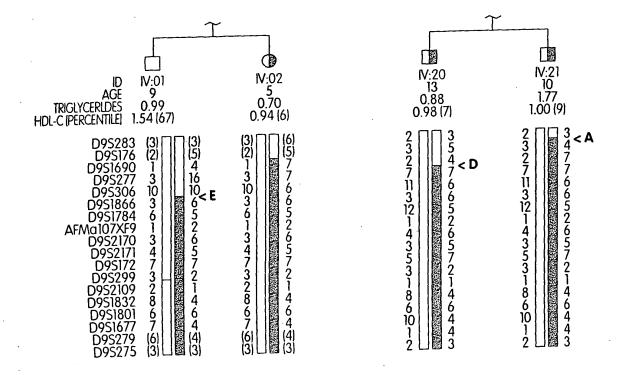


Figure 2A - (2)

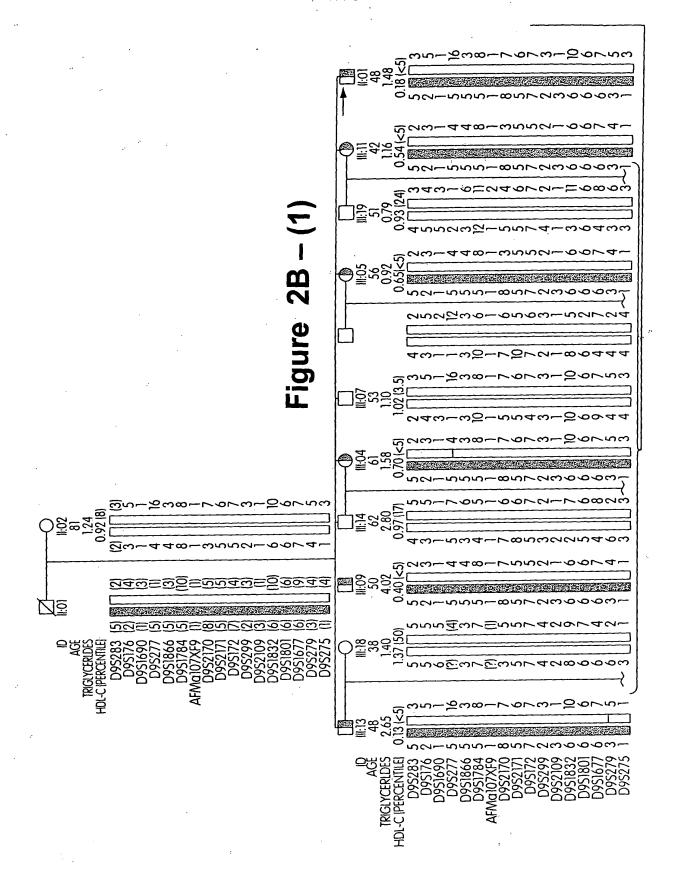


Figure 2B – (2)

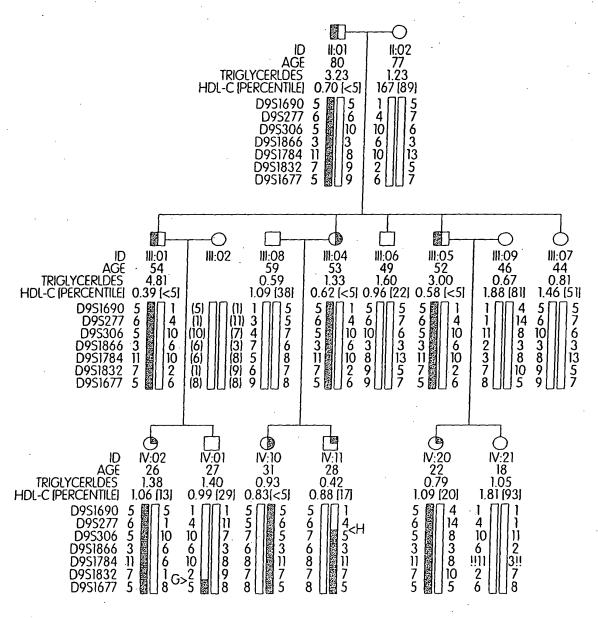


Fig. 2C

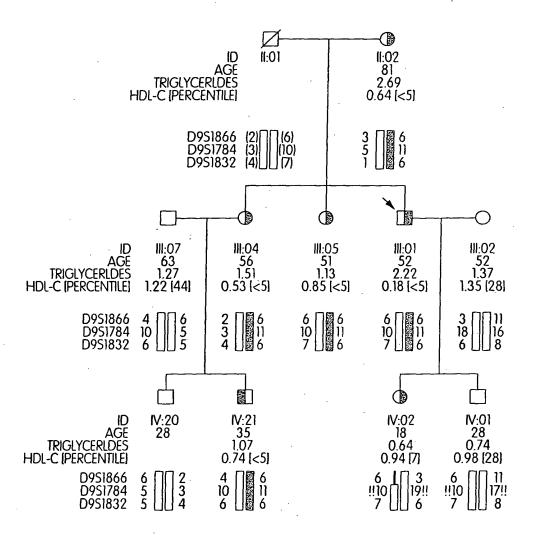
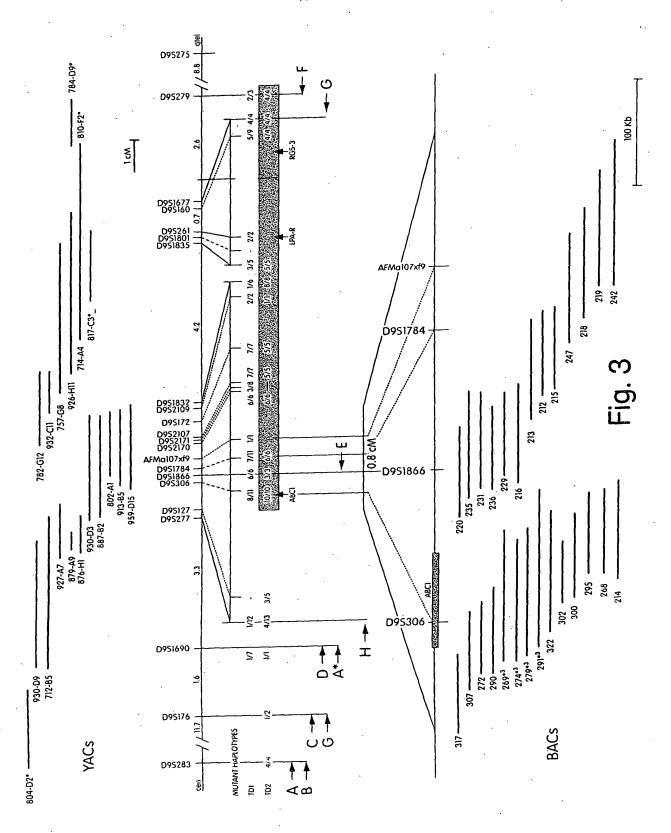


Fig. 2D



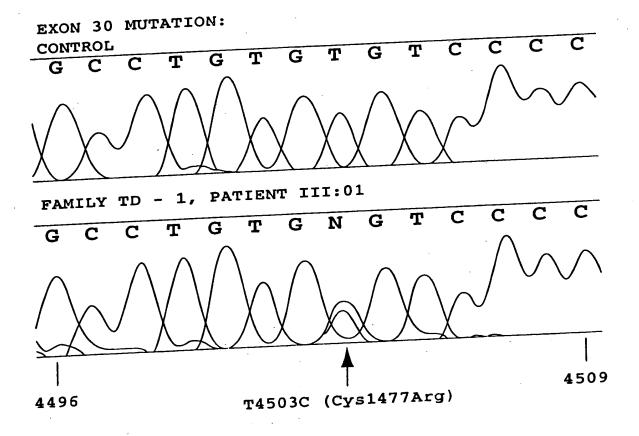


Fig. 4A

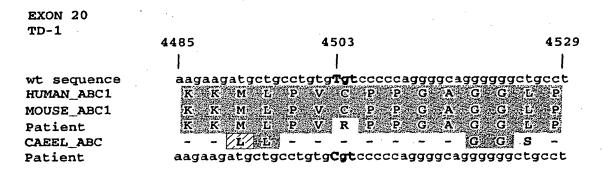


Fig. 4B

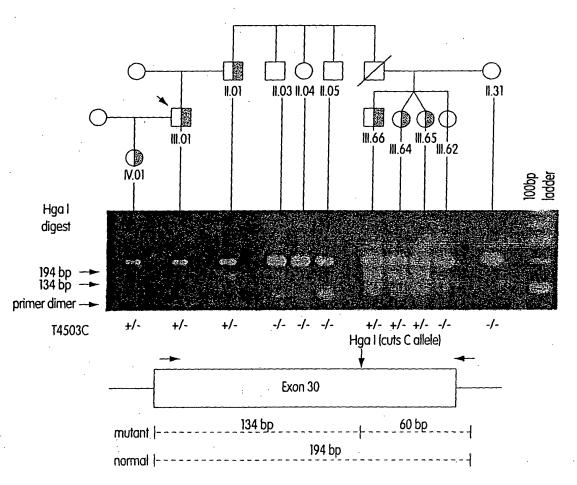


Fig. 4C

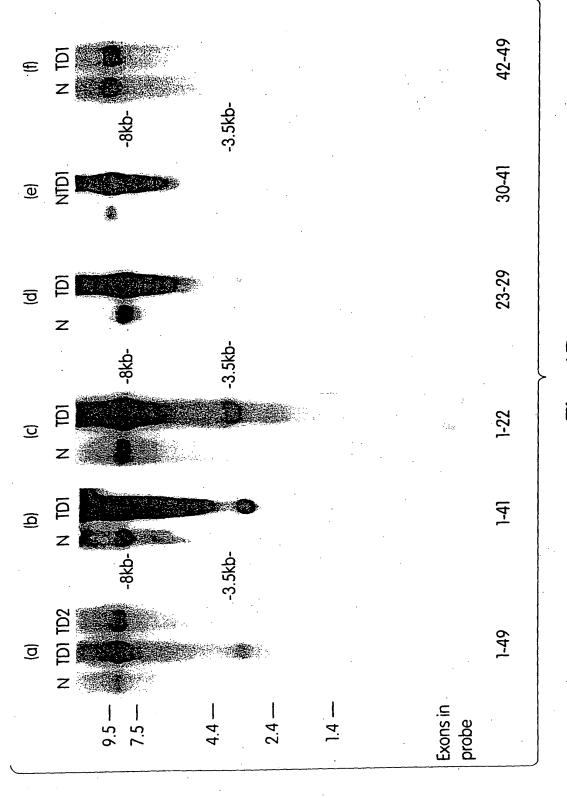
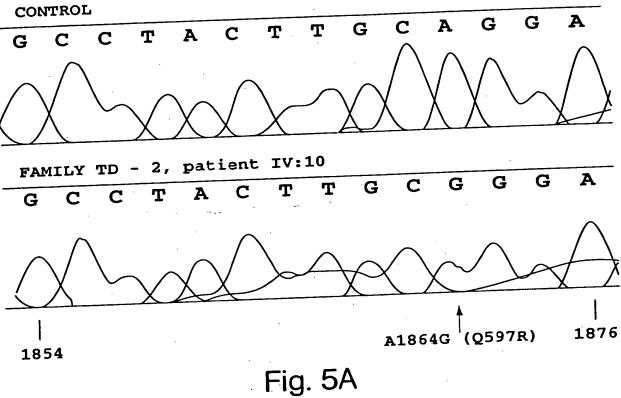


Fig. 4D

EXON 13 MUTATION:



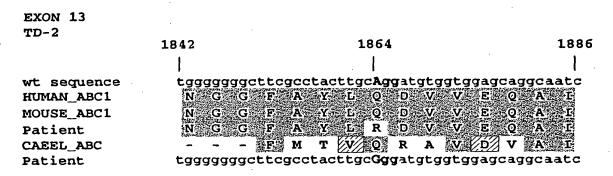


Fig. 5B

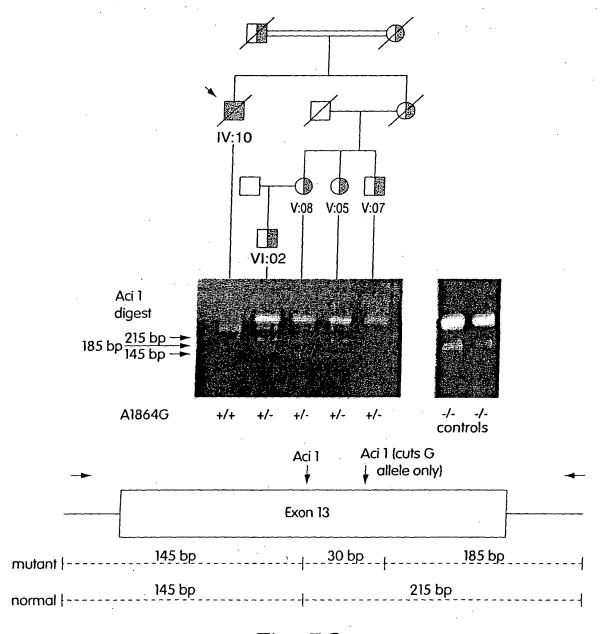


Fig. 5C

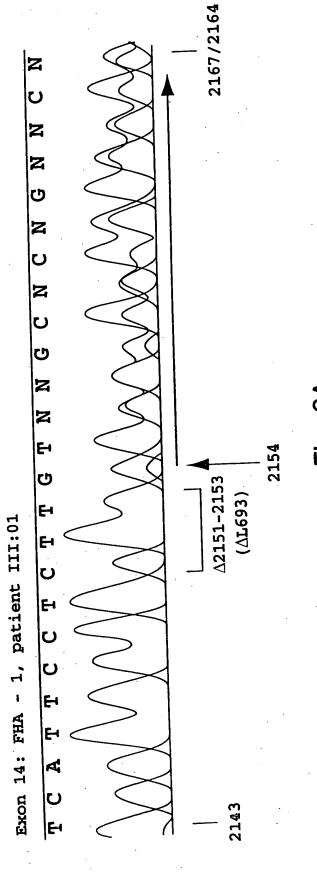


Fig. 6A

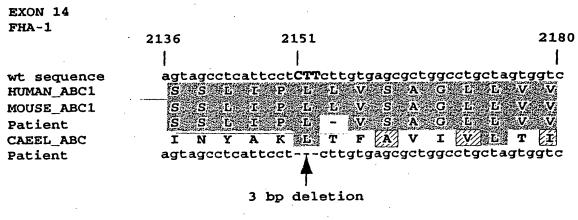
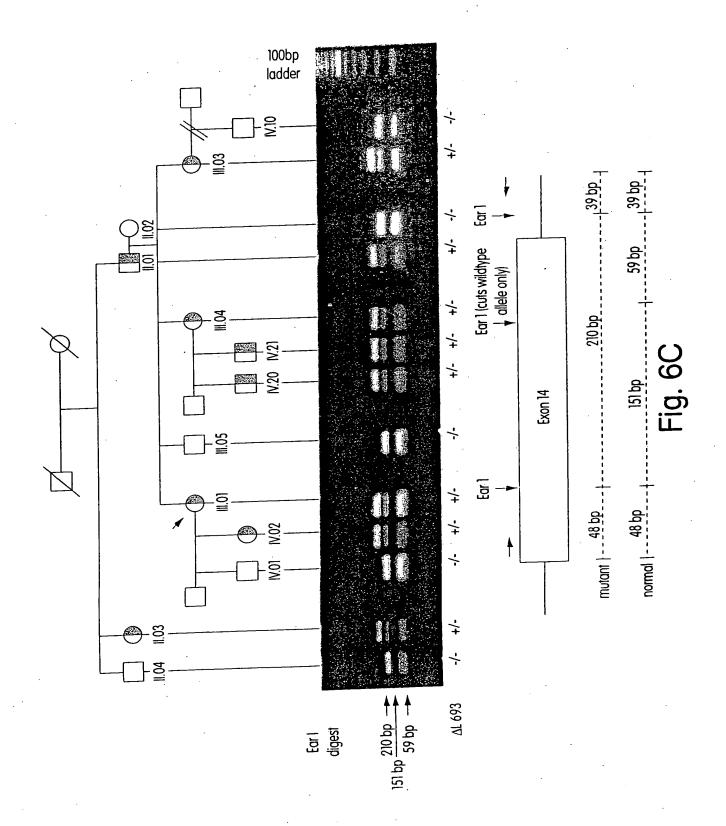


Fig. 6B



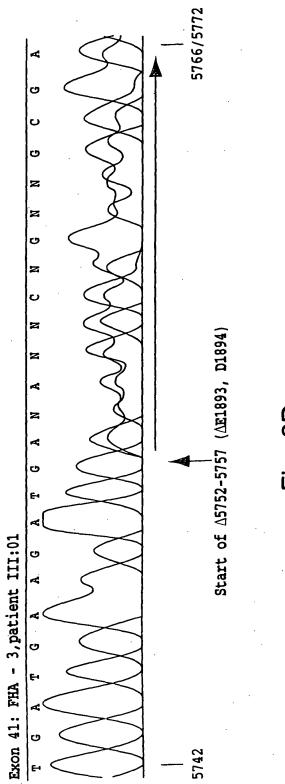


Fig. 6D

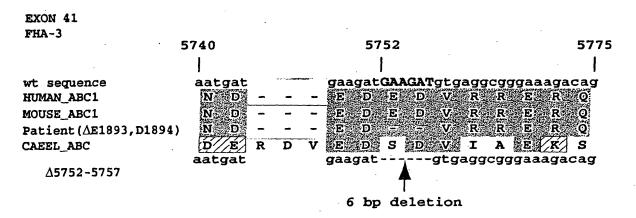
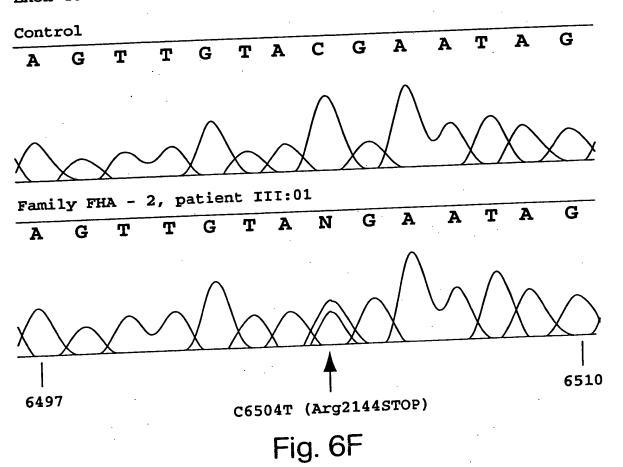
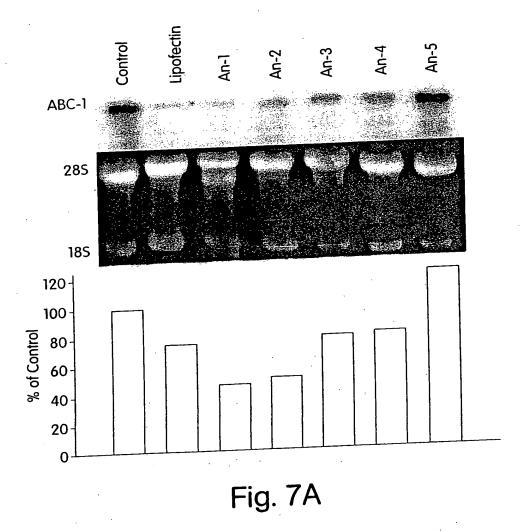


Fig. 6E

Exon 48 mutation:





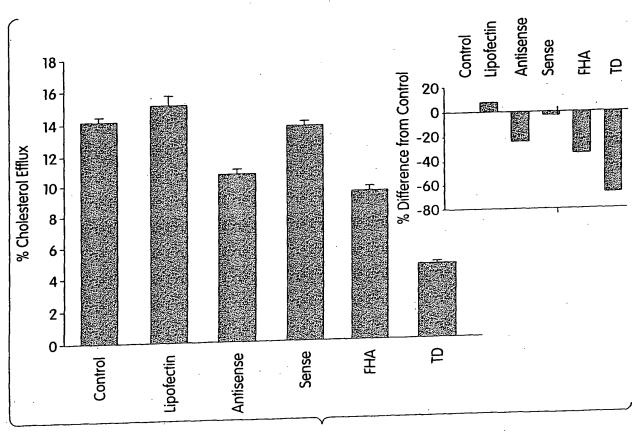


Fig. 7B

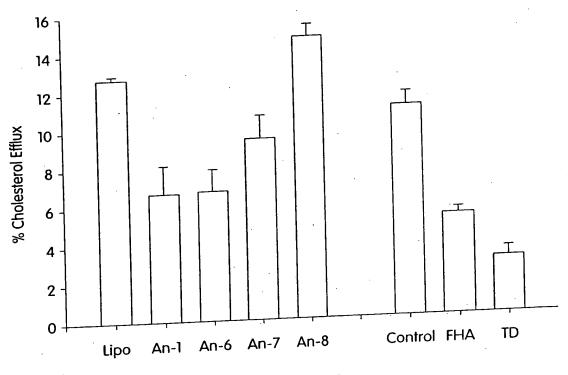
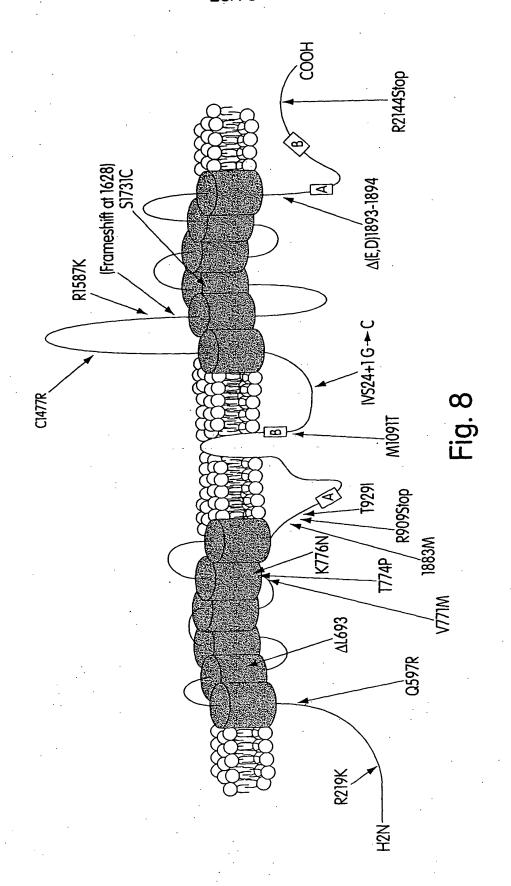


Fig. 7C



SEO ID NO: 1

MACWPQLRLLLWKNLTFRRRQTCQLLLEVAWPLFIFLILISVRLSYPPYEQHECHFPNKAMPSAGTLPWVQ GIICNANNPCFRYPTPGEAPGVVGNFNKSIVARLFSDARRLLLYSOKDTSMKDMRKVLRTLQQIKKSSSNL KLQDFLVDNETFSGFLYHNLSLPKSTVDKMLRADVILHKVFLQGYQLHLTSLCNGSKSEEMIQLGDQEVSE lcglpreklaaaervlrsnmdilkpilrtlnstspfpskelaeatktllhslgtlaqelfsmrswsdmrqe vmfltnvnssssstoiyoavsrivcghpeggglkikslnwyednnykalfggngteedaetfydnsttpyc NDLMKNLESSPLSRIIWKALKPLLVGKILYTPDTPATROVMAEVNKTF0ELAVFHDLEGMWEELSPKIWTF MENSOEMDLVRMLLDSRDNDHFWEOOLDGLDWTAODIVAFLAKHPEDVOSSNGSVYTWREAFNETNQAIRT ISRFMECVNLNKLEPIATEVWLINKSMELLDERKFWAGIVFTGITPGSIELPHHVKYKIRMDIDNVERTNK IKDGYWDPGPRADPFEDMRYVWGGFAYLODVVEOAIIRVLTGTEKKTGVYMOOMPYPCYVDDIFLRVMSRS mplfmtlawiysvaviikgivyekearlketmrimgldnsilwfswfisslipllvsagllvvilklgnll PYSDPSVVFVFLSVFAVVTILOCFLISTLFSRANLAAACGGIIYFTLYLPYVLCVAWODYVGFTLKIFASL LSPVAFGFGCEYFALFEEOGIGVOWDNLFESPVEEDGFNLTTSVSMMLFDTFLYGVMTWYIEAVFPGQYGI PRPWYFPCTKSYWFGEESDEKSHPGSNQKRISEICMEEEPTHLKLGVSIQNLVKVYRDGMKVAVDGLALNF YEGO ITSFLGHNGAGKTTTMS ILTGLFPPTSGTAY ILGKD IRSEMST IRONLGVCPOHNVLFDMLTVEEHI WFYARLKGLSEKHVKAEMEOMALDVGLPSSKLKSKTSQLSGGMQRKLSVALAFVGGSKVVILDEPTAGVDP YSRRGIWELLLKYROGRTIILSTHHMDEADVLGDRIAIISHGKLCCVGSSLFLKNOLGTGYYLTLVKKDVE SSLSSCRNSSSTVSYLKKEDSVSQSSSDAGLGSDHESDTLTIDVSAISNLIRKHVSEARLVEDIGHELTYV LPYEAAKEGAFVELFHEIDDRLSDLGISSYGISETTLEEIFLKVAEESGVDAETSDGTLPARRNRRAFGDK OSCLRPFTEDDAADPNDSDIDPESRETDLLSGMDGKGSYQVKGWKLTQQQFVALLWKRLLIARRSRKGFFA QIVLPAVFVCIALVFSLIVPPFGKYPSLELQPWMYNEQYTFVSNDAPEDTGTLELLNALTKDPGFGTRCME GNP I PDT PCOAGEEEWTTAPVPOT IMDLFONGNWTMONPSPACOCSSDK I KKMLPVC PPGAGGLPPPORKO NTADILQDLTGRNISDYLVKTYVQIIAKSLKNKIWVNEFRYGGFSLGVSNTQALPPSQEVNDAIKQMKKHL KLAKDSSADRFLNSLGRFMTGLDTRNNVKVWFNNKGWHAISSFLNVINNAILRANLQKGENPSHYGITAFN HPLNLTKQQLSEVALMTTSVDVLVS1CVIFAMSFVPASFVVFLIQERVSKAKHLQFISGVKPVIYWLSNFV wdmcnyvvpatlviiificfqqksyvsstnlpvlalllllygwsitplmypasfvfkipstayvvltsvnl FIGINGSVATFVLELFTDNKLNNINDILKSVFLIFPHFCLGRGLIDMVKNOAMADALERFGENRFVSPLSW DLVGRNLFAMAVEGVVFFLITVLIQYRFFIRPRPVNAKLSPLNDEDEDVRRERQRILDGGGQNDILEIKEL TKIYRRKRKPAVDRICVGIPPGECFGLLGVNGAGKSSTFKMLTGDTTVTRGDAFLNKNSILSNIHEVHONM GYCPOFDAITELLITGREHVEFFALLRGVPEKEVGKVGEWAIRKLGLVKYGEKYAGNYSGGNKRKLSTAMAL IGGPPVVFLDEPTTGMDPKARRFLWNCALSVVKEGRSVVLTSHSMEECEALCTRMA IMVNGRFRCLGSVQH LKNRFGDGYTIVVRIAGSNPDLKPVODFFGLAFPGSVLKEKHRNMLOYOLPSSLSSLARIFSILSOSKKRL HIEDYSVSQTTLDQVFVNFAKDQSDDDHLKDLSLHKNQTVVDVAVLTSFLQDEKVKESYV*

Fig. 9A

SEO ID NO: 2

GTCCCTGCTGTGAGCTCTGGCCGCTGCCTTCCAGGGCTCCCGAGCCACACGCTGGGGGTG CTGGCTGAGGGAACATGGCTTGTTGCCCTCAGCTGAGGTTGCTGCTGTGGAAGAACCTCA CTTTCAGAAGAAGACAAACATGTCAGCTGTTACTGGAAGTGGCCTGGCCTCTATTTATCT TCCTGATCCTGATCTCTGTTCGGCTGAGCTACCCACCCTATGAACAACATGAATGCCATT TTCCAAATAAAGCCATGCCCTCTGCAGGAACACTTCCTTGGGTTCAGGGGATTATCTGTA ATGCCAACAACCCCTGTTTCCGTTACCCGACTCCTGGGGAGGCTCCCGGAGTTGTTGGAA **ACTITAACAAATCCATTGTGGCTCGCCTGTTCTCAGATGCTCGGAGGCTTCTTTTATACA** GCCAGAAAGACACCAGCATGAAGGACATGCGCAAAGTTCTGAGAACATTACAGCAGATCA AGAAATCCAGCTCAAACTTGAAGCTTCAAGATTTCCTGGTGGACAATGAAACCTTCTCTG **GGTTCCTGTATCACAACCTCTCTCTCCCAAAGTCTACTGTGGACAAGATGCTGAGGGCTG ATGTCATTCTCCACAGGTATTTTTGCAAGGCTACCAGTTACATTTGACAAGTCTGTGCA** ATGGATCAAAATCAGAAGAGATGATTCAACTTGGTGACCAAGAAGTTTCTGAGCTTTGTG GCCTACCAAGGGAGAAACTGGCTGCAGCAGAGCGAGTACTTCGTTCCAACATGGACATCC AAGCCACAAAAACATTGCTGCATAGTCTTGGGACTCTGGCCCAGGAGCTGTTCAGCATGA GAAGCTGGAGTGACATGCGACAGGAGGTGATGTTTCTGACCAATGTGAACAGCTCCAGCT GGCTGAAGATCAAGTCTCTCAACTGGTATGAGGACAACAACTACAAAGCCCTCTTTGGAG GCAATGCCACTGAGGAAGATGCTGAAACCTTCTATGACAACTCTACAACTCCTTACTGCA **ATGATTTGATGAAGAATTTGGAGTCTAGTCCTCTTTCCCGCATTATCTGGAAAGCTCTGA AGCCGCTGCTCGTTGGGAAGATCCTGTATACACCTGACACTCCAGCCACAAGGCAGGTCA** TGGCTGAGGTGAACAAGACCTTCCAGGAACTGGCTGTGTTCCATGATCTGGAAGGCATGT GGGAGGAACTCAGCCCCAAGATCTGGACCTTCATGGAGAACAGCCAAGAAATGGACCTTG TCCGGATGCTGTTGGACAGCAGGGACAATGACCACTTTTGGGAACAGCAGTTGGATGGCT TAGATTGGACAGCCCAAGACATCGTGGCGTTTTTTGGCCAAGCACCCAGAGGATGTCCAGT CCAGTAATGGTTCTGTGTACACCTGGAGAGAGCTTTCAACGAGACTAACCAGGCAATCC GGACCATATCTCGCTTCATGGAGTGTGTCAACCTGAACAAGCTAGAACCCATAGCAACAG **AAGTCTGGCTCATCAACAAGTCCATGGAGCTGCTGGATGAGAGGAAGTTCTGGGCTGGTA** TTGTGTTCACTGGAATTACTCCAGGCAGCATTGAGCTGCCCCATCATGTCAAGTACAAGA TCCGAATGGACATTGACAATGTGGAGAGGACAAATAAAATCAAGGATGGGTACTGGGACC CTGGTCCTCGAGCTGACCCCTTTGAGGACATGCGGTACGTCTGGGGGGGCTTCGCCTACT TGCAGGATGTGGTGGAGCAGCAATCATCAGGGTGCTGACGGCCACCGAGAAGAAAACTG

GTGTCTATATGCAACAGATGCCCTATCCCTGTTACGTTGATGACATCTTTCTGCGGGTGA TGAGCCGGTCAATGCCCCTCTTCATGACGCTGGCCTGGATTTACTCAGTGGCTGTGATCA TCAAGGGCATCGTGTATGAGAAGGAGGCCACGGCTGAAAGAGACCATGCGGATCATGGGCC TGGACAACAGCATCCTCTGGTTTAGCTGGTTCATTAGTAGCCTCATTCCTCTTCTTGTGA GCGCTGGCCTGCTAGTGGTCATCCTGAAGTTAGGAAACCTGCTGCCCTACAGTGATCCCA GCGTGTGTTTGTCTTCCTGTCCGTGTTTGCTGTGGTGACAATCCTGCAGTGCTTCCTGA TTAGCACACTCTTCTCCAGAGCCAACCTGGCAGCAGCCTGTGGGGGCATCATCTACTTCA CGCTGTACCTGCCCTACGTCCTGTGTGTGGCATGGCAGGACTACGTGGGCTTCACACTCA AGATCTTCGCTAGCCTGCTCTCTCTGTGGCTTTTGGGTTTGGCTGTGAGTACTTTGCCC TTTTTGAGGAGCAGGGCATTGGAGTGCAGTGGGACAACCTGTTTGAGAGTCCTGTGGAGG AAGATGGCTTCAATCTCACCACTTCGGTCTCCATGATGCTGTTTGACACCTTCCTCTATG GGGTGATGACCTGGTACATTGAGGCTGTCTTTCCAGGCCAGTACGGAATTCCCAGGCCCT GGTATTTTCCTTGCACCAAGTCCTACTGGTTTGGCGAGGAAAGTGATGAGAAGAGCCACC AGCTGGCGTGTCCATTCAGAACCTGGTAAAAGTCTACCGAGATGGGATGAAGGTCGCTG GAGCGGGAAGACGACCATGTCAATCCTGACCGCGTTGTTCCCCCCGACCTCGGGCA CCGCCTACATCCTGGGAAAAGACATTCGCTCTGAGATGAGCACCATCCGGCAGAACCTGG GGGTCTGTCCCCAGCATAACGTGCTGTTTGACATGCTGACTGTCGAAGAACACATCTGGT TCTATGCCCGCTTGAAAGGGCTCTCTGAGAAGCACGTGAAGGCGGAGATGGAGCAGATGG CCCTGGATGTTGGTTTGCCATCAAGCAAGCTGAAAAGCAAAACAAGCCAGCTGTCAGGTG GAATGCAGAGAAAGCTATCTGTGGCCTTGGCCTTTGTCGGGGGATCTAAGGTTGTCATTC TGGATGAACCCACAGCTGGTGTGGACCCTTACTCCCGCAGGGGAATATGGGAGCTGCTGC TGAAATACCGACAAGGCCGCACCATTATTCTCTCTACACACCACATGGATGAAGCGGACG TCCTGGGGGACAGGATTGCCATCATCTCCCATGGGAAGCTGTGCTGTGTGGGCTCCTCCC **AATCCTCCCTCAGTTCCTGCAGAAACAGTAGTAGCACTGTGTCATACCTGAAAAAGGAGG** ACAGTGTTTCTCAGAGCAGTTCTGATGCTGGCCTGGGCAGCGACCATGAGAGTGACACGC TGACCATCGATGTCTCTGCTATCTCCAACCTCATCAGGAAGCATGTGTCTGAAGCCCGGC TGGTGGAAGACATAGGGCATGACCTGACCTATGTGCCCATATGAAGCTGCTAAGGAGG GAGCCTTTGTGGAACTCTTTCATGAGATTGATGACCGCCTCTCAGACCTGGGCATTTCTA GTTATGCCATCTCAGAGACGACCCTGGAAGAATATTCCTCAAGGTGGCCGAAGAGAGTG GGGTGGATGCTGAGACCTCAGATGGTACCTTGCCAGCAAGACGAAACAGGCGGGCCTTCG GGGACAAGCAGAGCTGTCTTCGCCCGTTCACTGAAGATGATGCTGCTGATCCAAATGATT

CCTACCAGGTGAAAGGCTGGAAACTTACACAGCAACAGTTTGTGGCCCCTTTTGTGGAAGA GACTGCTAATTGCCAGACGGAGTCGGAAAGGATTTTTTTGCTCAGATTGTCTTGCCAGCTG TGTTTGTCTGCATTGCCCTTGTGTTCAGCCTGATCGTGCCACCCTTTGGCAAGTACCCCA GCCTGGAACTTCAGCCCTGGATGTACAACGAACAGTACACATTTGTCAGCAATGATGCTC CTGAGGACACGGGAACCCTGGAACTCTTAAACGCCCTCACCAAAGACCCTGGCTTCGGGA GGACCACTGCCCCAGTTCCCCAGACCATCATGGACCTCTTCCAGAATGGGAACTGGACAA TGCAGAACCCTTCACCTGCATGCCAGTGTAGCAGCGACAAAATCAAGAAGATGCTGCCTG TGTGTCCCCCAGGGGGAGGGGGGCTGCCTCCTCCACAAAGAAAACAAAACACTGCAGATA TCCTTCAGGACCTGACAGGAAGAACATTTCGGATTATCTGGTGAAGACGTATGTGCAGA TCATAGCCAAAAGCTTAAAGAACAAGATCTGGGTGAATGAGTTTAGGTATGGCGGCTTTT CCCTGGGTGTCAGTAATACTCAAGCACTTCCTCCGAGTCAAGAAGTTAATGATGCCATCA AACAAATGAAGAAACACCTAAAGCTGGCCAAGGACAGTTCTGCAGATCGATTTCTCAACA GCTTGGGAAGATTTATGACAGGACTGGACACCAGAAATAATGTCAAGGTGTGGTTCAATA ACAAGGCTGGCATGCAATCAGCTCTTTCCTGAATGTCATCAACAATGCCATTCTCCGGG CCAACCTGCAAAAGGGAGAACCCTAGCCATTATGGAATTACTGCTTTCAATCATCCCC TGAATCTCACCAAGCAGCAGCTCTCAGAGGTGGCTCTGATGACCACATCAGTGGATGTCC TGATCCAGGAGCGGGTCAGCAAAGCAAAACACCTGCAGTTCATCAGTGGAGTGAAGCCTG TCATCTACTGGCTCTCTAATTTTGTCTGGGATATGTGCAATTACGTTGTCCCTGCCACAC TGGTCATTATCATCTTCATCTGCTTCCAGCAGAAGTCCTATGTGTCCTCCACCAATCTGC CTGTGCTAGCCCTTCTACTTTTGCTGTATGGGTGGTCAATCACACCTCTCATGTACCCAG CCTCCTTTGTGTTCAAGATCCCCAGCACAGCCTATGTGGTGCTCACCAGCGTGAACCTCT TCATTGGCATTAATGGCAGCGTGGCCACCTTTGTGCTGGAGCTGTTCACCGACAATAAGC TGAATAATATCAATGATATCCTGAAGTCCGTGTTCTTGATCTTCCCACATTTTTTGCCTGG GACGAGGCTCATCGACATGGTGAAAAACCAGGCAATGGCTGATGCCCTGGAAAGGTTTG GGGAGAATCGCTTTGTGTCACCATTATCTTGGGACTTGGTGGGACGAAACCTCTTCGCCA TGGCCGTGGAAGGGGTGGTFCTTCCTCATTACTGTTCTGATCCAGTACAGATTCTTCA TCAGGCCCAGACCTGTAAATGCAAAGCTATCTCCTCTGAATGATGAAGATGAAGATGTGA GCCGGGAAAGACAGAGATTCTTGATGGTGGACGCCAGAATGACATCTTAGAAATCAAGG AGTTGACGAAGATATATAGAAGGAAGCGGAAGCCTGCTGTTGACAGGATTTGCGTGGGCA TTCCTCCTGGTGAGTGCTTTGGGCTCCTGGGAGTTAATGGGGCTGGAAAATCATCAACTT TCAAGATGTTAACAGGAGATACCACTGTTACCAGAGGAGATGCTTTCCTTAACAAAAATA

GTATCTTATCAAACATCCATGAAGTACATCAGAACATGGGCTACTGCCCTCAGTTTGATG CCATCACAGAGCTGTTGACTGGGAGAGACACGTGGAGTTCTTTGCCCTTTTTGAGAGGAG TCCCAGAGAAAGAGTTGGCAAGGTTGGTGAGTGGGCGATTCGGAAACTGGGCCTCGTGA **AGTATGGAGAAAAATATGCTGGTAACTATAGTGGAGGCAACAAACGCAAGCTCTCTACAG** CCATGGCTTTGATCGGCGGGCCTCCTGTGGTGTTTCTGGATGAACCCACCACACGCATGG ATCCCAAAGCCCGGCGGTTCTTGTGGAATTGTGCCCTAAGTGTTGTCAAGGAGGGGAGAT CAGTAGTGCTTACATCTCATAGTATGGAAGAATGTGAAGCTCTTTGCACTAGGATGGCAA GAGATGGTTATACAATAGTTGTACGAATAGCAGGGTCCAACCCGGACCTGAAGCCTGTCC AGGATTTCTTTGGACTTGCATTTCCTGGAAGTGTTCTAAAAGAGAAACACCGGAACATGC TACAATACCAGCTTCCATCTTCATTATCTTCTCTGGCCAGGATATTCAGCATCCTCTCCC AGAGCAAAAAGCGACTCCACATAGAAGACTACTCTGTTTCTCAGACAACACTTGACCAAG TATTTGTGAACTTTGCCAAGGACCAAAGTGATGATGACCACTTAAAAGACCTCTCATTAC ACAAAAACCAGACAGTAGTGGACGTTGCAGTTCTCACATCTTTTCTACAGGATGAGAAAG TGAAAGAAAGCTATGTATGAAGAATCCTGTTCATACGGGGTGGCTGAAAGTAAAGAGGAA CTAGACTTTCCTTTGCACCATGTGAAGTGTTGTGGAGAAAAGAGCCAGAAGTTGATGTGG GAAGAAGTAAACTGGATACTGTACTGATACTATTCAATGCAATGCAATTCAATGCAATGA AAACAAAATTCCATTACAGGGGCAGTGCCTTTGTAGCCTATGTCTTGTATGGCTCTCAAG TGAAAGACTTGAATTTAGTTTTTTACCTATACCTATGTGAAACTCTATTATGGAACCCAA GGGGTTGCAACAATAATTCATCAAGTAATCATGGCCAGCGATTATTGATCAAAATCAAAA GGTAATGCACATCCTCATTCACTAAGCCATGCCCATGCCCAGGAGACTGGTTTCCCGGTGA CACATCCATTGCTGGCAATGAGTGTGCCAGAGTTATTAGTGCCAAGTTTTTCAGAAAGTT TGAAGCACCATGGTGTGTCATGCTCACTTTTGTGAAAGCTGCTCTGCTCAGAGTCTATCA ACATTGAATATCAGTTGACAGAATGGTGCCATGCGTGGCTAACATCCTGCTTTGATTCCC TCTGATAAGCTGTTCTGGTGGCAGTAACATGCAACAAAAATGTGGGTGTCTCCAGGCACG **GGAAACTTGGTTCCATTGTTATATTGTCCTATGCTTCGACCCATGGGTCTACAGGGTCAT** CCTTATGAGACTCTTAAATATACTTAGATCCTGGTAAGAGCCAAAGAATCAACAGCCAAA CTGCTGGGGCTGCAACTGCTGAAGCCAGGCCATGGGATTAAAGAGATTGTGCGTTCAAAC CTAGGGAAGCCTGTGCCCATTTGTCCTGACTGTCTGCTAACATGGTACACTGCATCTCAA GATGTTTATCTGACACAGTGTATTATTTCTGGCTTTTTGAATTAATCTAGAAAATGAAA

Figure 10A

1.4	ب	1.4	٣	1.5	. 6.0	×1.0	1.5	5.0	1.2		0.1	1.5		0.3	6.0	6.0	7.7	0.4	٤.	.0	0.7	6.0	
26 1.396	27 1.649	28 >0.728(1.4)	29 >2.589(3)	30 1.521	31 >0.944(\)	32 >1.062(/6.5)	33 1.475	34 0.522	35 1.228	36 >1.898(2)	37 0.112	38 1.545	39 1.087	40 0.265	41 >0.622(0.9)	42 0.909	43 2.355	44 0.372	45 >1.059(1.3)	46 0.483	47 0:659	48 0.941	>1.075
intron	intron	intron	intron	intron	intron	intron	intron	intron	intron	intron	intron	intron	intron	intron	intron	intron	intron	intron	intron	intron	intron	intron	
144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167
GCTAAAGGCCATCCAAAGAA	TCAAGTGCATCTGGGCATAA	TCTGAAGTCCATTCCCTTGG	CAATGTGGCATGCAGTTGAT	GAAGCTACCAGCCCATCCT	CATTTCCCCCACTGTTTCAG	CCAAGGCTTTCTTCAATCCA	GATCCGTTTAACCTGCCAAC	ATGCCCCTGCCAACTTTAC	CTCTGCAGCTGTTCCCCTAC	TATCAATCCATGGCCCTGAC	AGAGICCCIGCCTICI	AAGGCAGTCAGCAGTGTCAA	GGGGACATCCTGTGCTTAG	CCATTGGTGAGTGTTTCCCT	AGTCAGCAAACTGCTGGGTT	ATTGCTCCATCCTGGCATAA	TCATGGATGATTTTATGTGCTTC	GCGTGTGGAAAAGCCATAAG	GCCAATCATACAACAGCCCT	TGATCGCATATTCTACTTGGAAA	TCCCTTTATTTTAGAGGCACCA	GATCAGGAATTCAAGCACCAA	TGGGTTCCATAATAGAGTTTCACA
95	96	93	86	66	100	101	102	103	104	105	106	107	108	109	1110	111	112	113	114	115	116	117	118
114	exon 27 149 CACCAGAAGAAGGAGCATGG	78	29 99 (exon 30 190 TTACGGAATGATCCTGTGCTC	31	exon 32 33 CCGTTCCTTATATCCTCAGGTG	33	34	35	36	37	38	33	9	41 121 (42	43	44	45	46	47		49

Figure 10B

RORS IN PUBI	ERRORS IN PUBLIC SEQUENCE (differen	rences between samples	Les and Genbank entry	AJ012376.1):	
Exon/Inrton	Nucleotides	Amino Acid Change		Sequence difference/context	SEQ ID NO:
2	T150C A152G	no change	Public sequence: Correct sequence:	TOTCAGCTGTTACTGGAAGTGG TGTCAGCTGCTGGTGGAAGTGG	168 169
7		no change	Public sequence: Correct sequence:	AGGAGCTGGCCGARA AGGAGCTGGCTGAAGCCACAA	170 171
33	C4738T	T14951	Public sequence: Correct sequence:	AATGATGCCACCAAACAAATG AATGATGCCATCAAACAAATG	172
35	C5017T	P1588L	Public sequence: Correct sequence:	GAGGTGGCTCCGATGACCACA	174 175
43	G5995A	R1914K	Public sequence: Correct sequence:	TTCCTTAACAAAATAGTATC TTCCTTAACAAAATAGTATC	176
48	C6577T	P2108L	Public sequence: Correct sequence:	GGAAGTGTTCCAAAAGAGAAA GGAAGTGTTCTAAAAGAGAAA	178 179
49	G6899A	not applicable	Public sequence: Correct sequence:	AGTAAAGAGGGACTAGACTTT AGTAAAGAGGAACTAGACTTT	180 181
Mutations:					SEO ID NO:
13	A1864G	Q597R	More common: Less common:	GCCTACTTGCAGGATGTGGTG	182 183
14	delta Crr 2151-3	deltaL093	More common: Less common:	CCTCATTCCTCTTCTTGTGAGCG CCTCATTCCT/CTTGTGAGCG	184
15	G2385A	V771W	More common: Less common:	GCAGGACTACGTGGGGTTTCAC GCAGGACTACATGGGCTTTCAC	186
18	C2799T	R909Stop	More common: Less common:	AAAAGTCTACCGAGATGGGGAT AAAAGTCTACTGAGATGGGGAT	188
18	C2860T	T929I	More common: Less common:	GGCCAGATCACCTCCTTG	190
22	T3346C	MIO91T	More common: Less common:	ACACACCACATGGATGAAGCG	192

Figure 11A

(+1) G to C splice donor site	Altered transcript lenght	More common: Less common:	CCTGGAAGAAGTAAGTT CCTGGAAGAACTAAGTTAAGT	194 195
┞╌╂╌╂╼	C1477R	More common: Less common:	GCFGCCFGFGFGCCCCCAGG	196 197
-+	frameshift at aa 1628	More common: Less common:	TAGCCATTATGGAATTACTGCT TAGCCATTATCAATTACTGCT	198
	delta(E.D)1893-1894	More common: Less common:	GATGAAGATGAAGATGTGAGGCGGGA GATGAAGATG/TGAGGCGGGA	200 201
	R2144Stop	More common: Less common:	AATAGTTGTACGAATAGCAGG AATAGTTGTATGAATAGCAGG	202
1	Position Realitive to SEQ ID NO: 14 Containing Exon 1.			SEQ ID NO:
	8216	More common: Less common:	ACACGCTGGGGGTGCTGGCTG	204
	8158	More common: Less common:	GACCAGCCACGGCGTCCTG	206 207
	7780	More common: Less common:	CATTITICITIAGAAAAGAGAGGT	208 209
	7681	More common: Less common:	GAMANTTAGTATGTAAGGAAG	210
	7422	More common: Less common:	CCTCCGCCTGCCAGGTTCAGCGATT	212 213
	7115	More common: Less common:	TATGTGCTGACCATGGGAGCTTGTT	214 215
111	7047	More common: Less common:	GTGACACCCAACGGAGTAGGG	216 217
CCCT	6269	More common: Less common:	AGTATYCCCT/TGTTCACGAGAA AGTATYCCCTYCCTTGTTCACGAGAA	218 219

Figure 11B

Polymorphisms:					
Exon/Inrton	Nucleotides	Amino Acid Change		Sequence difference/context	SEQ ID NO:
2	G548A	no change	More common: Less common:	CTGGGTTCCTGTATCACAACC	220 221
9	G730A	R219K	More common: Less common:	GGCCTACCAAGGGAGAAACTG	222 223
Intron 7	G(+)2383 T	Not applicable	Allele 1: Allele 2:	TTTAAAGGGGTGATTAGGA	224 225
Intron 7	G(+)3035 T	Not applicable	Allele 1:	GAAGAATITITIOTITITITITITITITITITITITITITITIT	226 227
88	C1010T	no change	More common: Less common:	GCGGGCATCCTGAGGGAGGGG	228 229
8	G1022A	no change	More common: Less common:	AGGGAGGGGCTGAAGATCA	230 231
Intron 9	(-)42 ins. G	Not applicable	More common: Less common:	AGGAGCCAAACGCTCATTGT AGGAGCCAAAGCGCTCATTGT	232 233
Intron 13	T(+)24 A	Not applicable	More common: Less common:	AAGCCACTGTTTTTAACCAGT AAGCCACTGTATTTAACCAGT	234 235
15	A2394C	T774P	More common: Less common:	CGTGGGCTTCCACTCAAGAT	236
15	G2402C	K776N	More common: Less common:	TCACACTCAAGATCTTCGCTG	238
Intron 14	C(+)16 T	Not applicable	Allele 1: Allele 2:	GCAGCCTCACCCGCTCTTCCC	240
17	A2723G	I883M	Allele 1: Allele 2:	AGAAGAGAATATCAGAAATCT AGAAGAGAATGTCAGAAATCT	242
Intron 17	C(+)2000 G	Not applicable	Allele 1: Allele 2:	GCGCAGYGCCCYGTGACCTTA	244

Figure 11C

	T3233G	no change	More common: Less common:	GATCTAAGGIPTGTCATPTCTGG	246
G(+)118	E	Not applicable	A 6 6 1:	CTCTTCTGTTAGGACAGAGAGA	247
A(+)563 G	3. G	Not applicable	A 1919 1:	CATTICTAGGGATCATAGCCAT	249
G(+)321	£-	Not applicable	A 8 8 1:	AAGTACAGTGGGAGGAACAGCG	251
A(-)624 G	24 G	Not applicable	A 18 8 1:	AATTCCTAAAATAGAATGCA	253
T(+)30 C	20	Not applicable	More common:	GGCCCCTGCCTTATTATTACT	255
1	A(+)732 G	Not applicable	A lele 1:	GGCCCCTGCCGTATTATTACT TGAGAGAATTACTTGAACCCGG	257
1	て(+)898 平	Not applicable	A 6 6 1:	TYTICCTGAAACAATCGG	259
HI	C(+) 234 T	Not applicable		AACCTCAGTTCCCTCATCTGTG	261
¥.	G4834A	R158TK	or eac	CTGGACACCAGAAATAATGTC	263
12	c 5266G	S1731C	More common:	CTGGACACCAAAAATAATGTC	265
	T(+)18 C	Not applicable	Less common:	TCCTATGTGTGCTCCACCAC	267
	C(+)1665 G	Not applicable	Less common: Allele 1:	AAGAAGTGGCCTGTAATTTTGC	268
93	C6521T	no change	More common.	AACTGATTTGGTTGGTATAGCTG	27.9
			Less common:	CAGGGTCCAATCCGGACCTGA	272
3	(+)14 1ns. T	Not applicable	More common: Less common:	GCGTCAGGGATGGGGACAG	284
G2547A	A	V8251	More common:	CCACTTCGGTCTCCATG	285
E S	Polymorphism in an ABC1 BAC co This polymorphism is within ap	ntig:	The abrit conc	LL ALTY LEGANT PICCANG	287
A or G	5	Not applicable	Allele 1	THA ARK ARK	SEO ID NO:
			Allele 2:	TYGGGAGGCTAAGGCAGGAGAA	374

Figure 11D

Genomic contig containing ABC1 exon 1: Underline = putitive promotor lement

acctcttatagaatgatagaattcctctggaatgattggataacttcatttcatccttgacttttaccttggaggattt cagcccatgacccttctgcaaggccccctaactcaaggtagtttccctggaactgtggtttatggaatgtttcaggagt gtgaggaggtataatttaaggctgtcctagcaaggatacccttaaggatagagggccagtagcatctggaggccagaa aagttaaactgaggcagtcagattagcttcaggctcaattaagctgatgggtcagcctgggagaaattgcaggatgact ggtgtcttggccttcagtaaccttgttaggcttgtccctgaacgtggctaccgatccaaagacacatgatcagagaggc aattagagaacagaccttttccaaagcaagcatgttctgttgggcttagaagtttcatgtcctaatattataggaccct gtgcatctctctggagatgaggcacatgagtcatatctgtgattcttgcttttgtgtcaacatctcatgaataggcaat cagagetttggcaccaatgtattttcagttcatatctgatgtagttaaatccacctcctgctttgtagtttactggcaa gctgtttttgatataagacatctagaacactgtaaatatataacatttttatttgtctattatacctcaattacgaaaa agacatctagaagcaacctcatcaagagagatactgaggccgggcatggtagctcacacttgcaatcccattactttgg gaggctgaggcaggtagatcacttgaggtcaagagtttgaaaccagcctggccaacatgttgaaaccctgtctctatta aaaatacaaaaaagttagctgggcttggtggtgggcacctgtaatcccagctactccggaggctgaggcaggagaatca cttgaacctgggaggcagaggttgcagtgagctgagatcacaccactgcactccaacctgggcaccagagtgagattac atctaaaaaataaaataaagtaataaaaagagagatattgatagctgttgttggaaatttcaacttccatctcacttc ggtttaatgaaatagctgtcatataatcactgtttttgaaagaggagaattagttgctatctgtacattttgggtatgt gaactatttggatagaactctgagaaatgcattcagaacaacaaaaatcataggagaaatagctaagtgggaaggg gcatataagagttgttgaaaaagttatttcttgagaaaccagctctaatgctaggcaagtcacttgctttgggggaggc ctcagcttctctgtctataagattgcagcaggggtgtagtggggaatgagtcttcaacattccaagagattttatctact aatacgacagtcaaatggagcatgactttgtggaagcctctcctcttccacccagaggggccaatttctctgtcccagt gagatgttgacacttgtatgatccctgcttggagacttccctcttctggaacctgccctggctcaggcatgagggctga agacagatttagtgctgtagaagagtagagggcagtcacgggaaggagttcctgtttttcttttggctatgccaaatgg ggaaaaatcctcctatcttgtctttttagtgtcatcctctctccccttttcttcttcttataattctcatctctatc tctcctggaaatgtgcatgtcaagttcaaagggcacaatgttttggtgaggaagaggtgggagaacacgtgccaggtg agtaaaagtaattttataatcccagctgtcatttaagccacccctttgtgggtagcatatggtccactctctcagttca tigtcctaaagatgcttcatcagaaaggaataacttccaccccgttactctctgtccccttactctgctttattittct tegteaatectaceaceaceaceactgtttgaacaacccactattatttgtctgtttcccatccctggtagaatagga gccccatgaatgaaggaactttgcttctgttgttcaccactgaatctctaaggtatggaacacacctggcatgtgatag taatgaatatttatctactattcctcttccaaggcgatcacacaataatcaggctttacactatccagttcttaggtct tccaagttatgacttgtgaggtatgttaattatgataatagaaggcagtttatttggttcagatttattgatgtgtaat ttaccacagtaagacttcccctttacaaaagtatgatgagttttgacaaatggatacacatgtgtatctaccactgcca tgctccttttcagtctgtcgtcccctccacccatgaccactggtcaccactgcagtgatttctgtccccttcatttcac cttttccagaatgtcatataaatggaatcatgcagtatgtagtttttttgtgtctggcttatttttcttagcattaggct tatatttatttatgaggaggtgtctcactctgtcacccaggctggagtgcggtagcgcgatctcagctcactgcaacct tttatatttttagtagagatggggtttcaccatgttggccaggctgatctcaaactcttgacctcaggtgatccgccca gtcttttcgacaactaattgtttccagtttttggctattctgtataaggcttctataaatattcacaaatacctaggat gggatgactgggtcatataatagtactgtataaccttagcagaaactgtcaaactattttccaaagtggctcttccatt ttacaattccacagtgtattgagtcccagtgtctccatacacatgctagcacttttaatatttaatttagtgggtatgt aatgatatctcattgtggttttaatttgcatttctctgcagctaatgatgagtgtttctgcttatttgggaaggtttta atttagcagtctgttgtattctgtagatattaataacttcaaaatatcagtggcatttgcagttaaaatttccttaaaa aattggccaaaggtttccagcagtcacttctgccatgcccaaactgtatgaaacaaggctgaggtgtggagattgtcac attttggcaaggagtgatccacttgggtgactgatgagacccagagagcgtacgcctcgggcttgagggtgaggacggg cgggaagtcgactgcatggccctgctggccttgggaggctgcccagtccttagctaaagctggcagttatgggaaacag

Figure 12A-(1)

acttagattctattacgtttttcaggatgtcccaggagtcacctgggaagctcagcagtcctttgtgactttcaagcat atggtagaagctgctgaacacagagctccctctttggggataatttgcccaaatcatttaatcaggcttgagaaatgag gacatccccaagtgcttacgacaagccaggacccttttgcatactaaggaaaacagggatgaaggaaacagaaatggtc tetgetetgacteagaaggtagaaateetettteecageeaagtetteetagggagcaegtaggaagggetetgaacee acgtgtcagttgcaggggaggatatcaggaaaggacattgaagaagtggagacctaagtttgagacctaggcattagcc aggctagcagtgcttgaaaaagtgtcttaggacaagagaactcaccagtgaagtcccagtggtaggagagcgtgcagca tattetgageetgtatacacatetecagggeattgettageaggtgggagtggcaagagagtaggetggagteacaga agggaggccaggtagaccttggtgagcactggactctatgttcaggtgctgaggagctggcaaaaggttttaagtcggg gagaggcatgttcagatatttggtctagctgagtaactttgggtgctctgtgacaaatggttgggagaccagtgaggtg taactggaaatgtgtatgagggcagaagtgagtgtactgcatttgaaacattgagaaatctagtacatagtactgtctc ttggcttcagttacctgagcagaaggggccgggcattgccaaactctcctcttaggacagaattgctcccagtattgat aagcttgcctaagtgtgcccagcaaagccacggtagaactttctactgtggctctatgctacttcttagcaaccttctc catgtgcttcctggagagtccttggagtcagaaccttttcttgaaacccagacactttacttccaagaaaatgctgtc caagaaaactcatccttcccttctctcatgaacgttgtgtagaggtgtgtcttctcttcctttgagcttttccactca gggtttaggggaggtgatattctatatttgggtttggctctgggtactgcaacactaggctattaagatttcatcctta ctgctttgcccctcctatctttccagaaacccacaatggatttgctagaaataatggaacgtcctgtttggacaggata ttaaattaagccatgtactgtgttgggaaattatttatattatctcgttgaatccacagtagaacacagttgaacacca tacaaggtaagtattgtcatccttattttaccatgaggaaattgatgcttagagagcataaagccttggccaggggcac atagttgggaagccggggctaattcatgcctgggctctttctgatagttttcctttttaattgtcccctcattgt taccttggggatttcaagagattcatgtagcttctaaatcaacgaactgattcctggagagcagcttctgtatgagaaa aatctagctaattatttatttcagtgtctctggaatgcaagctctgtcctgagccacttagaaaacaatttgggatgac aagcatgtgtctcacaatgctgctctggttgccagtgctgtgctgccagttgtcatctttgaacaaactgatgcagtgc tggtttaactcttcctctttttggagtaagaaactttggaggcctgtgtccttctagaagtttgctgagcaaatggtaa acatagtggtaggctgtcttttcttctcagacactgcaatttcctccaatctcttgacttttctagaagttttaatcca agtccttgttgggtggtagataaaagggtattgttctactagagactgaccttggcatggagatctcatttggactcac agatttctagtctagcgcttggttttgtatccatacctcgctactgcattcttagttccttctgctccttgttcctcat geccagtgteccaecetaecettgeccetaetectetagaggecaeagtgatteaetgagecattteataageaeaget aggagagttcatggctaccaagtgccagcagggccgaattttcacctgtgtgtcctcccttccatttttcatcttctgc ccccccccagctttaactttaatataactacttgggactattccagcattaaataagggtaactgctggatgggtggc tgggatacacagaatgtagtatecettgttcacgagaagacettettgeeetagcatggcaaacagteetecaaggagg cacctgtgacacccaacggagtagggggggggtgtgttcaggtgcaggtgggaacaaggccagaagtgtgcatatgtgct gaccatgggagcttgtttgtcggtttcacagttgatgccctgagcctgccatagcagacttgtttctccatgggatgct gttttctttccagagacacagcgctagggttgtcctcattacctgagagccaggtgtcggtagcattttcttggtgttt tgagacagagtctcgctctgtcgccatgctggagtgtagtggcacaatcttggctcactgccacctccgcctgccaggtt caaagtgctgggattataggcttgagccaccacgcctggccgatggtgctttttatcatttgaaggactcagttgtata acccactgaaaattagtatgtaaggaagttcagggaatagtataagtcactccaggcttgaggcaaaatttacaaatgc cctcagtgtttttggccacctgagagaggtctattttcagaaatgcattcttcattcccagatgataacatctatagaa ctaaaatgattaggaccataacacgtagctcctagcctgctgtcggaacacctcccgagtccctctttgtgggtgaacc cagaggctgggagctggtgactcatgatccattgagaagcagtcatgatgcagagctgtgtgttgtggaggtctcagctga gagggctggattagcagtcctcattggtgtatggctttgcagcaataactgatggctgtttcccctcctgctttatctt tcagttaatgaccagccacggcGTCCCTGCTGAGCTCTGGCCGCTGCCTTCCAGGGCTCCCGAGCCACACGCTGGGG GTGCTGGCTGAGGGAACATGGCTTGTTGGCCTCAGCTGAGGTTGCTGCTGTGGAAGAACCTCACTTTCAGAAGAAGACA

gagggagggaaggaagctgtgttggttttcacacagggattgatggaatctggctcttatggacacagaactgtgtggt ccggatatggcatgtggcttatcatagagggcagatttgcagccaggtagaaatagtagctttggtttgtgctactgcc caggcatgagttctgatccctaggacctggctccgaatcgcccttgagcaccccactttttccttttgctgcagccctg ggaccacctggctctccaaaagcccctaatgggcccctgtatttctggaagctgtgggtgaagtgagttagtggcccca ctcttagagatcaatactgggtatcttggtgtcaatctggattctttccttcaggcctggaggaatataataactgaga cttgttttatttctgcagagggttctaagccattcacttcccagatgggccaataatgctttgagtaatctggagatca tetttaatgegeaggtgaatggaaetetteeacagagggatgtgagggetgtagageagagtgaaeteeetgaaaetea aatgtagcttaacatgtctgtaatcaaaatgatcatctttctgagattcaaagggctataagggactttggagagaatt ctaaatttcctttttattatagtgttacttaaatattaggaagttaaaagtaggtataaacttcttataggctgttat tatacaactatatgacccatacatatttacaaattaagtgcagccaaaattgcaaaatcaataccattcaaattaatac cttaaatgtggtgaggcagctgttgttcaactgaaaccaaattataagttgcatggcagtaaatgctatcatgctgatc attttgagtttggccagtctatattatcatgtgctaatgattgaattctccacccatttttctacttgtatgaccttaa tttgatggcacctgttccatcctcatgagtttgctacaattatactggtgccaacacaatcataaacacaaatataaac ttgggctttgaaatcttgtgccagaacttggctttaaagtaagcatttaaaaaaatccatatgtgtttattagactttgt ttagatgactgttgaaatgaaaacaaagtgtttaaaatcctcttagagaacttaaatataatccctcagcaatatgtat acagatetteettigagaaaaactgattgtgttcageeteteatgttacaaatggggaacetgaattetgaggteteta aaaaagagagnnnnnnacacttagaatgagcttccatgtgtgaggcactaactgattaggcattattaactagatttat tccttttaaggccccgcgatgtactgttatttccacatgttgtagctggggaacgtgctactcagagaggttaagtaac ttgtctgaggtccacaccactaacaaggagcacaggtagggttcaaatccagataatctgactttggagctggcactct aactcaatgtgcctaatcgcttttcagtggtgtcattattttgcctattctccatctgagaatattgaagtttctgact tattcctttgctacagtgtgatccagggctcctgcccttcttatcctggtagagggggcccacttgctgggaaattgtc tccgccatggtttatccatgttgtgtgtccattagtgagtagtgggaagaatcatatcatgttggcaatgaaagggggg ctatggctctggggtagtctagtctgaactcttattt

Figure 12A-(3)

SEQ ID NO: 15 Genomic contig containing ABC1 exon 2:

ctttttttttttttttttttttttttttgaggtgaagtctcactctgttgcccaggctggagtgcaatggagcgatc ttggctcaccccaacctctgtctcctgggttcaaacagttctcctgcctcagcctcccgagtagctgggattacaggctc ccgccaccatgcccagctattttttttttatttttcagtagagatggggtttcacccttttgaccaggctggtcttgaactc ctgacctcatgatcaacccacctcagcctcccaaagtgctgggattacaggtgtgagccaccacgcccggcctcataagt attttctaaatttatttacagtcatgccatttaaaaggaaagttgtattcctgtctttgttaatatttataagtgatttt attcagctacaagcttggaatggcatataattttgtattctgcttttttcacttaatattacatggctaatgatttctgt gtttcataaacattattctgatgatggcatgatatattgttgagtacatgtaccataattgaatcatttccctattgcta cttaagttcagtttcctaggatgaatttccaggaatagtaattgggcaaatgggataaacatgactcttgaatacgtatt gttaacattgctttcccaaagggctcaactgatttatatttccgtgttcattatcttttaaaccagctcatttactcacc ggtccctggtgtaccaagtgctgatacagacacaaagtacctggggaaattgagatgagggagtcctggctcagctggga gagtatgttgcctctttgggattatttacagaaatattagcaagaccagcccatctttggtcttgagtactccactgtc agcatgctttcttccagagagggatccatttgcctttatttttcattctgttgtgccgtctatgcaaactattcttgata gttttatggtaacagtgtttttttgttccatgagataaatttatacatgctcattgtggaaaatttagaaaagacaggaa ggagtgcagtggcgtgatctcagctcacagcaacctccgcttcccaggtttaagtgattctcctgcctcagcctcccaag tagctgggagtacaggcatgcaccaccacgcccggctaattttgtatttttagtagagatggggtttcaccatgttggcc aggetggteteaaaeteetgaceteaggtgateegeettggeetegeaaagttetgggattataggeaggageeae tgcgccagccacacctacgttcttatcatcctagtacatccactgtcattatcttgctgtatttccttctgcccagtctc actctgatcatgcagtggcgtgatcatgcagtgatctcggctcactgcaacctaggccttctgggttcgagtgattctcc tgecttagectcctgggttcaagtgattctcttgccttggcctcccaagtagetgggattacaggcatacacccccatgc ccatctaatttttgtatttttagtagacacagcgtttcactaaaattttgtattttagtagagatggggtttcaccatg ttggccaggctggtctccaactcctgacctcaggtgatccgccttggcctcacaaagtgattacaggcatgagcca ctgcatccatcgccaaaaagattttttaaaagagtttaatgtagaaccatatcaaaggtctttggaaataaaaaacagtt cagaaaggttcaattatgatctattcatagagtggaatatcaagtagacattacaggacatgttttaagattatatttta tgtcatgggaaatgctctcccagtatgatgttaaatgaaaaacagaatacaaaagtatatatgctgcatagtctcaata ttgtagagaaaaaatattatttatgtatgcatgaaaaaagacaaaagatgttaacagagatccattgttacttcagttta ctagggattgtctctgggaggtaggattaaggtgatttatatttacctttttaaacttttctgtattttttattttcaa attttccataaaaatataaggacttgaagatcaagaaaaaatttctgctttggctcagtgcagtcgtcacgcctgtaatc ccagcagtttgggagccctaggggagaggatcacttgaacccaagagtttgacgttccagtgagctatgatctccggatc agtetetetetgttgeeccagetggagtacagtggcacaateteageteacegcaacetetgeetectgggttcaagega gagacagggtttcaccatgttggccaggctggtctcgaattcctgacctcagctgatccaccggccttggcctcccaaag ataccagtattatcttggctgtgtgactctgaagccacagttgtaagttataattactctgaaacacaaggccctgtgac tcttttgggctctttggtgtttatcttgattacaacgttggaatatagaaatgaaaggaatgggagaggtgatagacttc aggcagtgtaactagttgtctgaacactactggctcaattatattgtgtctagtgatttccatcttgtccgtctgctaat ttatcgcctggtaactcactgaggcagggttttcctttggagaaacctcattgttttaaccagtgtatcatgcttgttta gaagttcaatgatctttttaactcatcggagaagatgatgaccagacctggacagatggggaaggactttgcactctctc tttacagtcctgagtgcacacaggtcaatatggaactatgtgtgaattttcattgtctttgagagccctcttctctgccc catagggagcagctttgtgtgcaattagaggagcaagggttgtgtgtatttagcacagcaggttggcctggtcctctcct $\verb"ctcaacatagtcaccacatacctggcactatgctaaggctgggaatgcagatgggtgcctgctttcagagtgctca"$ atgtgctgaggaagccagcaacagaaacagatgatttcaggagctccaggaaaatgctacaggaggagtgtgcctgggtt

Figure 12B - (1)

actggagtagcacaggaggagggcttctagctcaggctgagattttagtaaaggaaattatgccacgatgaatcctgaag aatgaatagaagtgaaccagataaagcacgataggaagcatcttcccttacctaagggaagacacagaggtatatggaat ggtatgttaaaaggttgggactccaaacagttctgttaaagcttagagagtggtgggagagactggagaagttgattaat tagtaaatgaagttgtctgtggatttcccagatcccagtggcattggatatccatattatttttaaatttacagtgttct atcttatttcccactcagTGTCAGCTGCTGCTGGAAGTGGCCTGCCTCTATTTATCTTCCTGATCCTGATCTCTGTTCG GCTGAGCTACCCACCCTATGAACAACATGAATgtaagtaactgtggatgttgcctgagactcaccaatggcagggaaaat ccaggcaattaacgtgggctaaaattggacttttccaaagatgctgtttttgggaaacatcaccaatgctttggatcagaa aacctaggcttctaatttgttgataaggcatgaactcaggagactgttttcagtcctagtgaatggtgataattgtaatt ataacagtagacaacatctcttttacacattttaaatcatgaaaatagaataaccttactgataattttagaaagtggtg attaaaagcacatttaagataatgccttaacacctagtcttttccatatgcatgatgtcttaatcacacattgcaaatca tggaacacagaattt

Figure 12B - (2)

SEQ ID NO 16 Genomic contig containing ABC1 exon 3:

caacatttacgtagctgggaaatgtagctgggacttcagtttcactgccctagtgatttttcctaccactaagcagctca gtccatacccctacgagacccacaagcttatgagatactgttcttccaggaaagcagtggggccagggccaccttttaat tgtgtttcttggcctggtcccatctttctcacaatatatagcaacagttatttacttgctgattttctaatgcacatcac aaaccagcctggccaacacggtggaacctcgtctctactaaaaaatacaaaaattagccaggcgtggtggcgcacacctgtaatcccagctactggggaggctgaggcaggagaattgcttcaacctgcgaggctgaggttgcagtgagccgagattgcgc acattttagattttatttaagcattatgccaagcaccactgaagtataagtttcaagggcaaactcagttttttcatcta ctagacgaatgatttctggaatgattacaagcaggcaagatggtgtagtggaaatagcaaatgtcttcggcatcagaca agttggggtttgtttgtatcctgcctctgcccttcaccgaggttgtgatcttgggcagattgttgagttttaacctagat tcctctgactccagatcataaattttcagaaaagttctgaaattcttgtatatactgatggtaaatgagacttttcctta $_{i}$ ${\tt catctatgcacttctttgttttgttttgagatggtcttgctctgtttgcccagactggagtgcagtagtgcaatctcc}$ gctcactacaatgtctgcctcccaggttccagtgagcctcctgcctcagcctcccaaatagctgagactacaggcatgtg ${\tt ccaccacgtccggctaatttttgtatttttagtagagacagggttttgccatgttgaccacactggtctcgaactcctgg}$ cctcaggtgattcgcccgcctcagcctcccaaagtgctgggattacaggcatgagccaccatgcccggccatatccatgc acttcttgcaaccttaccttcttttctcatcaccctccagggacctagttggaagagcagagttaaaagttaaggtgaaa $\verb"cttggagaggtgtcttgtccctaggaacaaaggactggtttgaaattctctgtaaatcttccccagttcaaaccagagtt$ at caagg to ttaa aaaact tccctgg g tcctg agag cccattat at tattact tg tcttcctg tacacccactg cctag tattact tattact transfer of the control of tgcaaggggccttgtttggttttccttgaactattaacaggaagatagggagattaactgtgtaaatgttcaataggccag agtecetgeagagggtggecaeagtgateagatettateaeateettgetttgggtgttgeetetetggttggagtatgg atagaaaagaaagaaagaccctatattgaaatgcaaagtgcagcaagtcctgactttggattaacttctcagcccatttg ctgggcaacagcagagtaagtgctggggtagattcactcccacagtgcctggaaaatcctcataggctcatttgttgagt ctttgtcctacaccaggcactctgcaaaaacgctttgcctgcaaggtctcatgcgatgctcaccaccagctctgtgaagtt ${\tt aattgtacttttatcaccattttacagatgagaaaactgagggtatggggtcaatgacttggctaaagtcactgcttagc}$ aagctgcagggactggatgtgaattccaattggtttgactccaaagcctgtgaagctacttgttcttcaccacctagagc tgtggttcttgataactgtgaactcttttggggtcacaaatagccctgagaatatgatagaagcaggagctctggccttt $\verb|ctgtccatacctgaacaggtccttgggttaagagccctcgtccagggcctattaatcttgatcctcataagcagcatcc|\\$ atgtattacggccgcaaaccaaactgtgccagaccgaatcctaggaccaaagcccaaatatgtcccatcatccttttggta agaagctcattgtaagaaagaagaggagagcaagaggatgacctagtgcatggggcctcattgttttaattagtgacaa aacaacaataataacaacaaaacccccgaagcttcacagatgacatcagaccccaagcctgtgtgtttttcaggtgccct ${\tt tgaggagctttgtagctggcagaggaggtgaaactgacaaatgtttggcagatggaggagagtaccagaggggtttgaga}$ tgagctaaattccaatctaaccgcagtgttgaggaagaggcttggattgggaccatggagatgggggttctactcccagt ${\tt tcgctcttgtcgcccaggctggagtgaaatggcgcgatcttggctcactgcaacctccccctcctgagttcaagcgattc}$ tcctgcctcagcctccagagtacctgggattacaggcgcctgccaccaagcccatcgaatttttgtatgcttagtagaga

cagggtttcgccatgttggccagggtggtcttgaactcctgacctcaggtgatccgcccaccttggcctcccaaagtgctgggattacaggcgcgagccactgtgcccagcccacttcatcttaccgtagttacctccttagagtatgaaaaaataggcttaggg cate cocca agte cocctet at geter gag aget gag ct get caa agag gaac taagg at gec agg gac tete the tagger of the content of the contentgcttaggacccctctcatcacttctccaacgctggtatcatgaaccccattctacagatgatgtccactagattaagaat ggcatgtgaggccaagtttccacctgagagtcagttttattcagaagagacaggtctctgggatgtgggggaatgggacgg acagacttggcatgaagcattgtataaatggagcctcaaaatcgcttcagggaattaatgtttctccctgtgttttttcta $\verb|ctcctcgatttcaacagGCCATTTCCAAATAAAGCCATGCCCTCTGCAGGAACACTTCCTTGGGTTCAGGGGATTATCT| \\$ GTAATGCCAACACCCCTGTTTCCGTTACCCGACTCCTGGGGAGGCTCCCGGAGTTGTTGGAAACCTTTAACAAATCCATg tggctggatttaagtgaagttgtttttgtaaatgcttgtgtgatagagtctgcagaatgagggaagggagaattttggag aatttggggtatttggggtatccatcacctcgagtatttatcatttctgtatgttgtgaacatttcaagtcctgtctgct gagggtagggctggcacaaagatgcatgctggaagggtccttgcccataagaagcttacagccaaggctaggggagttctgtcttctctgcatcaggtcacctctctcacctctgtcactgccccatcagactacaatgtctgcaggtctttctcccctagtatgggcataataagtgtcccccaaatgagacattgaggattcttcaaatgcacaggaccgtgatgtgagttaggacg gagtaaggacgatgggatgtggctcatgacaatcctgaggaagctgcagctgcggcacgcagggccacactgtcatgttc atggaccctagactggctttgtagcctccatgggccccttccatacac

Figure 12C - (2)

SEQ ID NO 17 Genomic contig containing ABC1 exon 4:

tcatgactgccattggtataaagatgaatataatccagaccagattcatgattattcatacatttttagtgtattaacttttaattctgcttttaaaataaattaaaacattctaatatgcccttaagagtatcccagcccaggccactgagcctactgt tgaatggagctgggtgtggggagccatgggagtgggttagggccagcctgtggaggacctgggagccaggctgagttcta tgcacttggcagtcacttctgtaaagcagcagaggcagttggcctagctaaagcctttcgccttttcttgcaccctttacagtgtggctcgcctgttctcagatgctcggaggcttcttttatacagccagaaagacaccagcatgaaggacatgcgcaa AGTTCTGAGAACATTACAGCAGATCAAGAAATCCAGCTCAAgtaagtaaaaaccttctctgcatccgtttataattggaa attgacctgcaccagggaaagagtagcccaggtgtctggggcttgttcccattagatcttccccaaggggtttttctc gtactaatcttctctgggaagacagaagaaaagtccccagggaagaatactacagacttggccttagggacagctagggg tgcagattgctgccaactgcattttttctgaagttggccatatggttgcagtgaatggatttatagacagagtatttctg tcattttcccctaatcatttcaattagtctgatgggcatttgaacttgttgtctttaaaaagtgaaatctttacctctgactgccatagcatcagagcagccttccaggcagtggcctggcaagggggacagaggtggtgggagcagctgagtgca gccagtaatggcatgt

Figure 12D

SEQ ID NO 18
Genomic contig containing ABC1 exon 5:

agctctccaggtgattctgatgcatacttaagtttgagaaccattgcttgttttgcattaaacaggagattagtctctgc agcttgtgggaataaagctttaaatctctccaattttagctctgtgaaaaggcagtggggagacaggaatgaacggacta gtgccacaaagctcaggtggggtgggtgagatcatttagaagagaaagaccgggcatggtggctcacgcctgtactgtca tgtactaaagataaaaaaaaaaatttgccagtcatggtgatgcatacctgtaatcccagctactcgggaggctgaggc aggagaatetettgaacccgggaggegggggttgcagtgagetgagattecaccattgcaetecaacetaggtgacaggg gtgtgtgtaacagcaccatcacactgtttgagttgaggagcacatgctgagtgtggctcaacatgttaccagaaagcaat acactatttctcaatagACTTGAAGCTTCAAGATTTCCTGGTGGACAATGAAACCTTCTCTGGGTTCCTGTATCACAACC TCTCTCTCCCAAAGTCTACTGTGGACAAGATGCTGAGGGCTGATGTCATTCTCCACAAGgtaagctgatgcctccaqctt tggaatatgcaacctggcgtcatgggccagctggttaaaataaaattgatttctggcttatcacttggcatttgtgatga tttcctcctacaagggatacattttaagttgagttaaacttaaaaaatattcacagttctgaggcaataaccgtggttaa gggttattgatctggaggagctctgtctaaaaaattgaggacaggagactttagacaagggtgtatttggagacttttaa gaattttataaaataagggctggacgcagtggcactgagttgagaactgttgctttgctttgcattaaataggagatcagt ccctgcagcttgtgggaataaggctttaaatctctccaattttagctctgtgagatggcactggggaaacagaaatgaac ggactagtgtcacaaagctcaggtgggatggacgagatcacttcaaaggtctgtaatcccacgtctataatcccagcact ttgggaggccaaggcgggaaaatcacttgaggtcaggagttcgagaccatcctggccaacaatgcaaagcctgtctctac taaaaatatgaaaattagctcagcgtggtggcatgctcctgtagtcccagctactcgtgaggctgagacaggagaatcgt ttgaacctgggaggcggaggttgcagtgagccaatatcacgccattgcactccagcctggctgacagagtgagactccat__ ctcaaaaaaaaaaaaaaaaaaagaattttataaaatcaggaaataatattagtgtttatgttgaattttaactttagaat catagaaaacttcctctggcatcattattagacagctcttgtgcagtgggtagcaccagacccagcttgcatggttattg atttttcagagacactttttgagcttattctctggcagaaaggggaactgcttcctcccctatctcgtgtctgcatacta gcttgtctttacaagaagcagaagtagtggaaatgtttattcttgaaaataagctttttgcttcacatgatctagaattt ttaaaattagaaaaatgtgcttactgcg

SEQ ID NO 19 Genomic contig containing ABC1 exon 6:

Figure 12F

SEQ ID NO 20

Genomic contig containing ABC1 exon 8: ccgtttggcaaatgctcagtaaaagaaaagggttagaaggggagaaaggcattttatcccaagccttcaggaatcaggat gaggatgtcttcaccttgtggtggggagtaattatacaattagagacagcacattggagtgtggctgatatgctgtgtga tgatagctctagctctctgcctagcagaggaaggacatttcaatagaagaaaaagtttaagaccttgccgagaaacagag aaaggatgtttgtctttttaagaagttgaaaaccctgtttgcagacaaaagccctccagttttggcagtaaactttcatg caagggaagaaaaaggcaggggatgacattgttgacaattgtgaggaattaccatgtgccaggcactgtgcgaggggctt tgtacatatcctctagttttagtgcttataaaaactctgtgatatgtgcacagcattttaaactttgctgcatagtcgagaaaatggaaggatggggaatttgagtcatttgcccagggttctatagctaccccaggttcccatgactggagaattgggg cacagggtggcggggggagagtgagtgacaagaatcctaacaatcttatttccattgagtccttataaaagaagtggatta tttgctatgctgtcttgaacatctgtcatcttgtaggcctaacggtaaacacaaaaacactttacctcctatagctttcaattaagatctctcagtttgtgtttgtaatagttttccaggcaagttctccctaggttcggcttctagtgtttaacctttagttataaagtgaacccaaagagagaaagtagaaacaaaacacctcacctgtttttgctcatgaattactctctatggaa ggaacaatcatgaacacctctgcgtatcacagaggcctatctgagtctgacgtttaagggagaccgcgtaggtccctttg atagaacctttaggcaggttttcttagaaatgcacattgaggattatgcttggatattgtgatgatcagaatgatactca atcccttctgcatttggaattctctttgaaagaaaacatcccaggcagctatttctcagagatagtgagtcccagccact ${\tt tctagacattttcttgtgtagtctacattataatttcacagcagtctctgatatgacaaatgtcaaaatagcccaacctt}$ ctctaaacttcagagatgtctgatatgatattgaataaaacaatgctcatagaaacatcaagaaaggtggattttccctg gatacttttttcctgcttgacaaataacagtgaagaaactgatctcacgtctttttctctttggaagcctgaacactcag tgctttctgccctaatttatcttttccctgttctaatgaattattgtcctatatctgctgtgcagttaggtgacatataa cag caatta aata tatga attgg tacata ta aag atttgacta aa aactcg at g ta aa aa aa aag t g t t c ta cattca atttccagtgttagaaacagtgctgacttgaacagagtgacagaattccatctttccctatttttgacagctttaaactttata ttttcttcctttcttgtgagccgtcattaacttgtttctcaaagccattcccgtattacccatcttgcagacgcagacag atttgggaatttgcggtcagagttgtattggacacatcccccagcccacatgagatccttttaatctattgcatattaa $\verb|ctagttttaagtacaatattcctacttcatttaaaaccattaatcaaagaatgagtttgaaaatgaacaaaatgcaaact|\\$ ttttaattcacttgtttatttccaatagagatttcaggtttacatttgaattcagaaacaaagttttcttctcattaca **GAGAACACTAAACTCTACATCTCCCTTCCCGAGCAAGGAGCTGGCCGAAGCCACAAAAACATTGCTGCATAGTCTTGGGA** CTCTGGCCCAGGAGgtaagttgtgtctttccagtaccaggaagcggatcatccactgtatcagtattttcattcctgagt $\verb|ctggcaagaggtccttttgagttgaatatcacatgggatgtaatatcaattttcaaagtataagtgatgtaaacaataat|$ gttttgatttccttattttagaaatgaagaaacctaaaactcatagatgtctcagagctaattggttagtggctaacagc $\verb|ctgccactgcccatgcactgcttttgtctgaccagcaatttctccatattgcttcttcagtagcaatgccaatcatttta||$ ${\tt ccaacacacatgcttgctaactaacaggaataacgtggtacccctaattcagccctttcccttgaaagcatctggcttct}$ gaggttcaactatgggaatatggtctcttaatgaacattaagttgagtttgccttttaggtccacatgttgacaaatgta actccacctttctgactcccagccttgtctcaaattaggcttggaagcgaggaactgtctggtgtcccccagcataggaa gctgagccagggggcagtgctcacaaacaatacagactttaacgtgtaggatattggaaaataataatttgtggggaaat tgtctcagacttggtccacccttatttttagctgcttctctaatccgtttttctttttttggtgcttgtatctaacctac ccattttttggtgcttgcatcattttttcaaatatcaaaaacgaactttatgttttctaacaatgaaagtattgcatgttcattgtggaaaatgctgaagacttggaaaatacaaaaatgctgagatcaaacactattgatacgttagtgtatttcttcc gaggagaagccttctttcagcttgccatttgttaccctggttatgaaggctggtaaccttttttactaggtagagaagct

ggaccaactggggttcttccagggggagaatgagaaagagaaactgttttgcaagtccgtagctatttctctagggccct gttagctgacattgacatgccttgcattgctctgcagatcccctcgcagccctctgtcccttgttcatttctggccttag agaaagcaaagcagggtctgtaacaggggaggctgcctctaaactcagggtttggttacagctgttttcacttacatcacgaccatctgcctctttcaatagaacacctccagatccctttgatcaaaagttactcattgtctgacttgctatttctgtg agataaatgggagaagatcaataaatgcacttgtttgtccagtcagcgtgtggaaagttgataattttgaccaaagcaca accctgaaaggaaaagaaaagggagtgaatgtcttctgagaagctgcctaggttcagacagtgtcacccatttccctgt ttttccagtcacccaatgagttaattgacaaaactgggattcaaacccagaactgttggattccaaagcctgtgttgttg tggaaattgggaggaaatgaggaattagggaataagatgaatgaaagctgacctgagtttcacatctgggtgatgggaagggaggacagggaggcagcatctcagatgtccacccagcaccgaccagctgcctggcattgctaggtgttgaggactcagc ${\tt acaggagggatatatgcagtgaagaaaaagcagggtaaggggcatagagcatgagaaggtgcttttttaaaaggggktga}$ caggaagaatggcagatacaaagacattgatgctagagcatgcctaaggaatgtgtttaaggaccagggaaagtgagcaa tgggttgagaagagactggggatgggggaaagggaggacaaaggacattgtgctggattgagaaagcagtaagtcagtttctgctgggaagagtcaatagtttggaataactcaataatttatggtgcttctttagaaagatttgctggctttatgtggga $\verb"ctgttatttaaaaatctctagggctgttccaataagcaacaaaaggcaaaatggcctggttctctgtcccctttctgtct$ gtatgcctcgtacaggttatgaaaagaaaagttgggaaaagctgtccacctcacctaattgtgttcttgtggagtgtgc tagatgccccctctctggagaaaaaaaatccttgtggcctctgacccacctctggagagcctagttcccttctggaggcagaaggcaaagcttaggacctagagagtgctggaccacgccactcacaggaaccagcaggctgtgaggttgaaagctaggc cggtgtgaacacgcagtgacatttccaggaatacagggatttattaatgatttcttgtgaaatgtttggaaatacaaagt actctataaatatttcataatagcattggggctgagaactccacaaagtgccggaatacatttgcatgtaagacagaacg ctgcctgggtcattgatgcctgttgagtggcagtcacagacactgcctagggtttctgactcacgctgttgggactgttc tatg caggg caccetett g t g g catagg at t t g t g caccacacacact g t t g t t g t t g t t g t t g t t g t t g t t g t t g t t g t t g t g t t g t g t t g t g t t g t g t t g t g t g t t gagagggcagtgtccaggccatggtataagcatctactgcccccagggttaccaaaaccaagccaagttgtgtctcagcg agctccgtgaagcatggagaagttgagtactcagagacatgacgtgacttttcaaaggctgtaagctgacgagggacata ggctggattgcagtggtgcttggctcactgcaacctctgcctcccgggttcaagcaattctcctgcctcagcctccccag tagctgggattacaggcacctgccaccatgcctggccaacatttttgtattttttagtagagatggggtttcaccatgt ${\tt tggccaggctggtcttgaactcctgacctcaggtgatccacccgcctcgacctcccaaagtactgggattacaggtgtga}$ ${\tt gccactgcacccggcccagactcgagtttttcatcttaatgctttttcattgcctgacactttactgagaccaagatagg}$ ${\tt gaacttcacatacagtaccttttctcccaaggcggaagagggctgttcaatttctacactagagttcggggagttttaga}$ aatgagtcagttatcgaggatgagagcagttcctgataggctcaaccacaatgagatgtagctgttcagagaaagcattc $\verb|tttatctataaactggaagataatcccggtgaaacgaagcccagccccagggggcttcactaactccaggctgtgcttct|$ caaactttagtgagcataggaatcacctgggcatcttgtgaagctgtagatttgaattctgcaggtcggcagaggggtct

cagaatccgcatttccaacaatgtctccagtaatgctgatgctcgtccctggaccacagattgggtagccaggttct ggcaagctcatcccaaggctttgagatgacatcagacaaaatatgttctgggacatggcttttgagaggtcaagaaaata。 agatgtttctttctctctctcatccccaacccttgcactgcccttttctcccttcccctaccctcctttctgtccccatcc ctgacgccagCTGTTCAGCATGAGAAGCTGGAGTGACATGCGACAGGAGGTGATGTTTCTGACCAATGTGAACAGCTCCA CTCAACTGGTATGAGGACAACAACTACAAAGCCCTCTTTGGAGGCAATGGCACTGAGGAAGATGCTGAAACCTTCTATGA CAACTCTACAAgtgagtgtccatgcagaccccagccctgtccccaaccccatcccttagttctggccttgt gtcatctcctcctctgtagcagcgttagatgtctacatgcccatttgcccaccagactgagctcttcctagaggagaga ggcttctcttgaatagctacctgtccccagttctctgaatgcagcctggcacatctcaggtgcacagtagtgtttatcaa tggaatgaatgattgacagccaaccttctggttttctggggggatgtggatgggttgccagggtgatcaagaatgaga taatggcagaaggacaaatcctgcaagatctcacttatatatggaatatatgtaaggtagaaagtgtcagtttcacatga gagagtagatccgaagtgttcacactacacaaaaaaggcaactatgaggtgatggatttattaacagcttgattgtggtg atccttttacaaagtatacatatattaaaacatcacattgtataccttaaatatatacaatttttatttgtcagttgtaa ctcaaaaaagctagaaaagcatttttaaaaaggatgatgtactggtcttaatattaccattgagataagctttataataa cataaaaagaaataacagtaatgataatagcaacaacaacaacaaaaagaactaacatttaagtagaatttcttgtgca ctgtgcattctgtttaagttatctcattttaccctcatgataacctgcagggaagattctttaaccccacatttcatagg ctcagagaggttaagtgccttggttagagccacatcagagttaatccacaagagccaggattcaagcccaaatctgcctg gatctgtgctctctaagataactgttagtggtggcgtgtgttctcacactcagacatttgatctgccctttgtttccc attcttagctgcaaggcagtgttaaagaaccctgtgtctccatatccactccccacacttaagcacttttgtgggcccgt gtgccgtatgcctcgtggcagcagggatccaatgtcacagttttaggcagtggcatccttttccttgaaaacttgatgca aagaaccttttcttctctggagtaaagcactccagacattcgcaagttgctttacaagccttaaaaggatggtattgtag gcaactttaattaaatcccatctcctcctcccccagcttgcaagttgacccaaggaagccttcatttccatgacagac ttaattgtgagggcatcctca

Figure 12G - (3)

SEQ ID NO 21

Genomic contig containing ABC1 exon 9 through 22:

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Figure 12H - (1)

tgg cactg tct acccatg tt gcct caccccac agg tcc cagg gcacctct ctc tcg gg caagtctt gg aaccctct gacact ${\tt gatttgctctcttttctgagctgcttttagccacccatcctcgggacctgttttctctctgcctccacccctgcgggcag}$ ${\tt tcttaggtctcctgcccctcacgagcaccccagagaggccacgtgctcagtgatctcagtgggcgcatctttctagtctt}$ ${\tt gctattctttttggccatgttgttcagaaaccatactgggcagggccgacttcaccctaaaggctgcgtctcttcactct}$ ${\tt gcttttgtttgttccaaataaagtggcttcagaattgctaaccctagcctctgtgaacttgtgaggtacaattttgtgtc}$ tgttatgttaacaaaaatacatacataccttcctggtgatggtataaattgctattctctattggaaagcaatttggaat gaaaatttaaagaaccattttaaaatatgctatcctgcgtacctccattccaccccccagggatgtagcctactgaa at a attituda aga aga caccatat gaga ga a a attitut gatat tight attitut gaga a attituda aga caccatat gaga ga a attitut ga a attitut ga a attitut gaga ga a attitut gaggcgcaaggggggaaaagcttataatgttagtgaaactaagactgatttttttataaagcagcagttttcagacccttgg agactccaattcggtagaaccagagcttcatcttctctgtcgaagctgtgacaggagttgcaaatgcctctcctttttgc tgagtttgcagctgctgtttttccggcagcacatctgtgcaggcctctgcctcggcccctctggatctgctgattgagcagcggattgatctgtccttctctttcgtgttgacccatgtgaggaaccaactggcaagggaacaagaaatggaaataggcc tcctttgcatcatgacctgtacatcctgcaattggaaaagattgtactttagttggtttaaccagcagcattattttctaaactaagcagtaagaaggaattaggttttatgtgggatcaacagactgggtctcaaaagaggaaggtgatagaacacag tggggagggggggggggtgcactagaaacagagggcctatgctttcattctggctttgctacttaatagctgtgtgacccaat $\verb"cttagagacttaacctctctgaacttccattttctcatgtataaaatgggaaatattaaaggatactcactgggctggtg$ gcttgtgcctgtaatcccagcacttggggaggttgaggtggggaggatcacttgagcccaggtgttcaagaccagcccagg caa catgg caa agact ctgtctctatgaa aa aa attaa aa attagc caggtgtgtgtgtgtgtcacctgtagtcttagctacttgg tagg ctg agatgg gag at cacttgg gcttgg gag gt caagg ctg cgg tg agctg tg at tccatcactg cactccaggttgtgtaaggtgaagcatatacactattcaacatagtaactatataaaggaagtattgttgttgttactgtagttaata ccattaagtgagatgtttcgtatagtggaaagcacatggactctgaattcagactggtctgactttgagtctcagctcca gggacactgtcatttacctcagttttctgtgaggataaaacaacgacagtgtatatgcaagtattttgtaaattttgtag $tgctcctcaagatttagttggtgtttactacttgtactttctcactggaatggcag \verb|ATGCTGTTGGACAGCAGGGACAAT||$ GACCACTTTTGGGAACAGCAGTTGGATGGCTTAGATTGGACAGCCCAAGACATCGTGGCGTTTTTGGCCAAGCACCCAGA GGATGTCCAGTCCAGTAATGGTTCTGTGTACACCTGGAGAGAGCTTTCAACGAGACTAACCAGGCAATCCGGACCATAT ggttcaggcaggaggcaagtttagaaataatgtatagtctcatttacaaaactatccctcaagcctaacacaggatttga tattctatataggctcaagagaatatttctacccattttcttctaggttttcctatctcagtgactaatggtagcaaagcattcccttaaaaaggcattatttgtgaaacttayctaaaatcgaattcgggtccaattaaatttttgaaattttatatta aaacagaaaagtaagataagatcattgttttaacctcttttcctccacaaaatcaataacatatccctaaattact cttagaatttctcttaaattgcagtgaaaaccaaaatccttcattcttggttgaaggttggaaaactacgttagagagg attagagagagaggatgagcaatcgtgtagtcagcccttgcctcctagtgtaggatttgtctcagccactgcttgttgtc ctggctgccaacgttctcatgaaggctgttcttctatcagTGTCAACCTGAACAAGCTAGAACCCATAGCAACAGAAG TCTGGCTCATCAACAAGTCCATGGAGCTGCTGGATGAGAGGAAGTTCTGGGCTGGTATTGTGTTCACTGGAATTACTCCM RGCAGCATTGAGCTGCCCCATCATGTCAAGTACAAGATCCGAATGGACATTGACAATGTGGAGAGGACAAATAAAATCAA GGATGGgtaagtggaatcccatcaccagcctggtcttggggaggtccagagcacctattatattaggacaagaggtac $\verb|ttatttaactaaaaatttggtagaaatttcaacaacaacaaaaaactcaacttggtgtcatgattttggtgaaattg|$ gtacatgacttgctggaaggtttttcataggtcataaaataacagtatcttttgatttagcatttctactcaagggaatt ${\tt aattccaggaattttggtggcaggcacctgtaatcccagctactcgggaggctgaggcaggagaattgcttgaacccagg}$ aggcagaggttgcagtgagctaagatcgcatcattgcactcccgcctgggcaataagagtgaaactccatctcaaaaaaa

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Figure 12H - (6)

SEQ ID NO: 22 Genomic contig containing ABC1 exon 23 to 28:

 $\tt gtgaacacacattaaagcatgaagcatgaactagacatgtagccaggtaaaggccttgctgagatggttggcaaaggc$ $\verb"ctcattgcagcattcattggcaggccacagttcttttggcagctctgcttcctgacctttcaccctcaggaagcgaggct"$ gttcacacggcacacacatgccagacagggtcctctgaagccacggctgccagtgcatgtgtcccagggaaagctttttc ctttagttctcacacaacagagcttcttggaagccctccccggcgaaggtgctggtggctctgccttgctccgtccctga $\verb|cccgttctcacctccttcttgccatcagGAGGACAGTGTTTCTCAGAGCAGTTCTGATGCTGGCCTGGGCAGCGACCAT|\\$ GAGAGTGACACGCTGACCATCGgtaaggactctggggtttcttattcaggtggtgcctgagcttcccccagctgggcaga gtggaggcagaggaggagggtgcagaggctggtggcgctgactcaaggtttgctgctgggctggggctgggtggctgcg tgtcccagagagctgagatgattgggggtttggggaatcccttaggggagtggacactgaataccagggatgaggagctga gggccaagccaggagggtgggatttgagcttagtacataagaagagtgagagcccaggagatgaggaacagccttccaga $\verb|ttttcttgggtagcgtgtaggaggccagtgtcaccagtagcatatgtggaacagaagtcttgacccttgctatctct|$ gagggaacctactttataagcataggaaagggtgaagaatcttttaagattcctttactcaagttttcttttgaagaatc ccagagettaggeaatagaeaccagaetttgageetcagttatecatteacceatceacceacceacceatectte catecteccatecteccattcacccatecacccatecagetgtecacccattctacactgagtacctataatgtgcctgg ctttggtgatacaaaggtgaataagacatagtcctttcctttgcccccaaccctcagaccagagatgaacatgtggaatg acctaaacacctggaacaggtgtggtgtatgagcggcaggcctctgatgagagggtgggggatggccagccctcactccg aagcccctctgagttgattgagccatctttgcattctggtcctgcagATGTCTCTGCTATCTCCAACCTCATCAGGAAGC ATGTGTCTGAAGCCCGGCTGGTGGAAGACATAGGGCATGAGCTGACCTATGTGCTGCCATATGAAGCTGCTAAGGAGGGA GCCTTTGTGGAACTCTTTCATGAGATTGATGACCGGCTCTCAGACCTGGGCATTTCTAGTTATGGCATCTCAGAGACGAC CCTGGAAGAAgtaagttaagtggctgactgtcggaatatatagcaaggccaaatgtcctaaggccagaccagtagcctgc attgggagcaggattatcatggagttagtcattgagtttttaggtcatcgacatctgattaatgttggccccagtgagcc atttaagatggtagtgggagatagcaggaaagaagtgttttcctctgtaccacagtacatgcctgagatttgtgttga aaccagtggtacctaacacatttacatcccaaccttaaactcctatgcacttatttaccctttaatgagcctctttactt aagtacagtgkgaggaacagcggcatcaggatcacttgggaacttgttagaaattcagcaacttgggcccagctcagacc ctgtgacctcatttaattctcaaaaaaagatgaaaaaatgaacactcaggaatgctgacatgagattcagaatcaggggt ttggggcttcaaagtccatcctctttatccatgtaatgcctccccttagagatacaacatcacagaccttgaaggctg aaggggatataaaagctgtctggccaagtggtctccaagcttgacagtgcagcagaatcacctggggatattattaaaaa taaacatactaaggtttggcttcagggcctgtgaatcagaatttctggaggtgaggccttgaagtctgtatttctattgcatactttggacacagtggtctatagactagagtttggaaatgattgcgctcattcagattctcttctgatgtttgaattg ctgccatcatatttctagtgctctatttcctcctgctcattctgtcttggataacttatcatagtactagcctactcaaa gatttagagccacagtcctgaaagaagccacttgactcattccctgtaggttcagaataaatttcttctgcgcagtgtct gtcatagctttttttaaattttttttttttgatgagactggagttttgctcttattgcccaagctggagtgcagtgg tgcgattttggctcactgcaacctccacctcccaggttcaagcgattctcctgcctcagcctcccaagtagctgagatta caagcatgtgctaccacgcccagctaattttgtattttagtagagatgggttttatccatgttggtcaggctggtctcgagctccagacctcaggtgatctgcccgcctcggcctcccaaagtgctgggattataggcctgagccacagcgctcagcca taactttaatttgaaaatgattgtctagcttgatagctctcaccactgaggaaatgttctctggcaaaaacggcttctct ${\tt cccaggtaactctgagaaagtgttattaagaaatgtggcttctactttctctgtcttacggggctaacatgccactcagt}$ TTCCTCAAGGTGGCCGAAGAGAGTGGGGTGGATGCTGAGACCTCAGgtaactgccttgagggagaatggcacacttaaga tagtgccttctgctggctttctcagtgcacgagtattgttcctttccctttgaattgttctattgcattctcatttgtag

Figure 12 I - (1)

gatggtaccttgccagcaagacgaaacaggcggccttcggggacaagcagagctgtcttcgcccgttcactgaagatga TGCTGCTGATCCAAATGATTCTGACATAGACCCAGgtctgttagggcaagatcaaacagtgtcctactgtttgaatgtga aattctctctcatgctctcacctgttttctttggatggcctttagccaaggtgatagatccctacagagtccaaagagaa gtgaggaaatggtaaaagccacttgttctttgcagcatcgtgcatgtgatcaaacctgaaagagcctatccatatcactt tatacattaggtgtttaattgttgaacaaatattcattcgagtagatgagtgattttgaaagagtcagaaaggggaattt gctgttagagttaattgtaccctaagacttagatatttgaggctgggcatggtggctcatgccagtaatcccagcgcttt gagaggctgaggtgggtagatcacctgaggtcaggagtttgagaccagtctgaccaacaaggtgaaaccccgtctctact aaatacaaaaaattagccgagtgtggtggcacatgcctgtcatcccagctacttgggaggctgaggcaggagaatcgctt gaacccaggaggcagaggttgcagtcagccacggttgcgccattgcactccagactgggcaacaagagtgaaaactccat ctcaaaaaagaaaaaaaagaattagatattttggatgagtgtgtctttgtgtgtttaactgagatggagaggagagcta agacatcaaacaaatattgttaagatgtaaaagcacatcagttaggtatcattagtttaggacaaggatttctagaaaat $\verb"cttcatacagtatcagtacttagatcatttgaaatgtgtccacgttttaccaaaatataatagggtgagaagctgagatg$ ctaattgccattgtgtattctcaaatatgtcaagctacgtacatggcctgtttcatagagtagtctataagaaattgatg acttgattcatccgaatggctggctgtaacacctggttacgcatgaacacctcttttcagttgtctcaagacacctttct $tttctgtacttatcagacaaggactgaaaggcagagactgctactgttagacattttgagtcaagcttttccttggaca\underline{t}$ agctttgtcatgaaagccctttacttctgagaaacttctagcttcagacacatgccttcaagatagttgttgaagacacc $agaagaaggagcatggcaatgccgaaaacacctaagataataggtgaccttcagtgttggcttcttgcag {\tt AATCCAGAGA}$ GACAGACTTGCTCAGTGGGATGGCAAAGGGTCCTACCAGGTGAAAGGCTGGAAACTTACACAGCAACAGTTTGTGG CCCTTTTGTGGAAGAGACTGCTAATTGCCAGACGGAGTCGGAAAGGATTTTTTGCTCAGgtgagacgtgctgttttcgcc agagactctggcttcatgggttgggctgcaggctctgtgaccagtgaaggcaggatagcatcctggtcaagatatggatgc ${\tt cggagccagatttatctgtatttcaatcccagttctattccttgccagttgtgtatccgctggcaagttacttctctatg}$ cctcaatctcctcatctgtaaaatggggataataatattacctgcaatacagggttgttacgaaaataaaaatgaatagg atgtgaatttattagaaacatgatttttctctgagttgatgtttaactcaaactgatagaaaagataggtcagaatatag attttttcactctataaaatcaagaaatatagagaaaaggtctgcagagagtctttcatttgatgatgtggatattgttaagagcgggagtttggagcatacagagctcaagttgaatcctgactttgctacttattggctatatgaccttgggcaagctgagatagttctcattatagtagttgttatacagaattattcactcaatgttaattttctgcattgaaatcccagaacattagaattgggggcattatttgaatctttaaggttataaggaatacatttctcagcaataaatggaaggagttttgggttaa $\verb"cttataaagtatacccaagtcatttttttcagagaagatatggtagaaagtcttaggaggttgaagaaggaattggata$ tttattctttctgagactatcatgggagataatgactatggttgtccatgattggagccgttgctgtagagttggtttta ttatagtgtaggatttgaatgggccatgtgttctcagacctcagaataaaaagagaaaactgaggccagtggggagcgtg acttcacatgggtacacttgtgctagagacagaaccaggattcaggacttctggctcctgggttcatggcccaa tgtagtctttctcagtcttcaggaggaggaagggcaggacccagtgttctgagtcaccctgaatgtgagcactatttact tcgtgaacttcttggcttagtgcctctgccaggtggccataacctctggccttgtgttgccagagaaaaggtttagtttt caggetecattgetteccagetgecaagaatgeettggtgeageaeagteataggeeetgeatteeteattgeegtgetg gttggtcggggaggtgggctggactcgtagggatttgccccttggccttgtttctaacacttgccgtttcctgctgtccc cctgcccctccactgcctgggtaaagATTGTCTTGCCAGCTGTTTTGTCTGCATTGCCCTTGTGTTCAGCCTGATCGT ${\tt GCCACCCTTTGGCAAGTACCCCAGCCTGGAACTTCAGCCCTGGATGTACAACGAACAGTACACATTTGTCAGgtatgttt}$ gtcttctacatcccaggagggggtaagattcgagcagaccaaagatgtttacgagggccaagggaatggacttcagaatt acacggtggaat

Figure 12 I - (2)

SEQ ID NO: 23 Genomic contig containing ABC1 exon 29:

gcccacattttcttcttacatagttcaggtttactttatttttcctttccggctgctgaccctgtattgcccgtagttg ttgccctttcttggaaaatcctgcttgtctgtgccaaagggataattgtgaaagcacttttgaaatacttaatgagttga cccatttaaaacaagctccactttggagtgctctacgtcaccctgatgccgaatacagggccagagtctgagatccttct gggtggtttctgtgttttgttcatttctgttttaagagcctgtcacagagaaatgcttcctaaaatgtttaatttataaa ${\tt CAATCCCgtgagtgccactttagccataagcagggcttcttgtgcttgttgcctggtttgatttctaatatgctgcattt}$ $at caact {\tt gcat} {\tt gccac} {\tt atcaact} {\tt gccat} {\tt tgcccttt} {\tt gaattattat} {\tt tattat} {\tt tatta$ gtaaccgaactaaattatctaggaacaaacgtttggagagtcttctaacaccgyscaaagcacgtcattacagacatttg tttactgatttagaaccttaatatttaatttaaatacgcactttacacttactgatgaaatgcttttcctttctct $\verb"cccagcccctgtacttaagtgcttcaataggctctcattatatatgatttttaggttttgcttatcagcttcttcgcttt$ tataatctgaaaagatggcatatgaatttttataaaaagggacactttcttcttctcaaattgtatattttattgtacttaggggaagggaggtcaccagatcactgtgagtgaagatggtgaggatgaggatcttatgaggccgtgctcaaggctggtagaggtgggttagtgtttccaggtttaggcagaatctcagctgaggtcatgaaacaacagtgatctctgaaaaattat ggcaaggtgggaaggtgctggagaattggagagggggcaaacttgactttcaagtttcaatgggaagataggtgactctg cacaccacagaacagtgagcatgataacctgtttatacaaggttctagagcagatttctaaatggatagctactgtgtgc ttgtttgttcttaattagtattggatagttactaaatacttgttagtacttagtacataatgggtggtaaatcctagcagctaatattggttcccaaataaccagatgacaaggatagagaaggacacagacacggcctatctggatttcatggtgcctt tgattttccacatgaaggttgtgtagggaagatagaagcatgagatgagatgataatatagttatctggattcatcactg gccagctgaaccatatgaactcatggattgatgctagcttaggaaggctctgtaggagccagaactgggctgagagccag cccatagagacaaaagaggcccggccctgacatcagagggttcaaacatgatgtctgagccccacctacagtctgccgga ggtggttggaaggaagagcctttatccttacaattcttactgaaattcaaatttttaggttttgcaaaaaaatggtggac ctgaaggaaatttgacaggagcatgtctcagctgtatttaaatttgtctcagccaatccccttttgaatgttcagagtgt aagcttcaggagggcagcgcgtcttagtgtgacttttctggtcagttcaggtgctttaaggagacaattagagatcaatc $\verb|ctctgttgcccaggctggagtgcagtggctcaatcttggctcactgccacctctgcctcccaggttcaagtgattctcct|\\$ acctcagcctcctgagtagctgggattacaagcatgtgccaccacactggctaa

SEQ ID NO: 24
Genomic contig containing ABC1 exon 30 and 31:

tettge cag teteta ct catttt teag caca tegag cata agate cag actett te ceagg cetete teat ctg get cetctcctccttcttatcattactcttcttcgtagcttatcctactccagccatgctgtcttcctattattcctaaaaarta gaaatgcatttcttcctagggcctttgtacctgcacttgccatcgcttttgctcagaatgttctttttgccaagcttttg cccagcttgttctccatcattgttatgttttggctgaaatgtcttctcttagtaggttcattctccccagtcactgtctt tttattttgctttattttgggccatctaaggttatcttattagtgtatttgttgttcgtctcctccatgggcatacacct ccat gaagg cagg tatttt cacct tagg ccctc gaata tactg gacag catct gg cacgt ag tagat gct caacgaat gtttgttgtgtgagcaaatggttggttgattggattgaactgagttcagtatgtaaatatttagggcctctttgcattctattttacttatgtataaaatgatacataatgatgatataaatgatgtcacagtgtacaaggctgttgtggggatcaagcaatc aaatgagatcatgcttgtcttttccaaatggtgagggaatagatgcatgtttgtggttgttacggaatgatcctgtgctc ctgaggcaacagaaaggccaggccatctctggtaatcctactcttgctgtcttccctttgcagAGACACGCCCTGCCAGG CAGGGGAGGAAGAGTGGACCACTGCCCCAGTTCCCCAGACCATCATGGACCTCTTCCAGAATGGGAACTGGACAATGCAG AACCCTTCACCTGCATGCCAGTGTAGCAGCGACAAAATCAAGAAGATGCTGCCTGTGTGTCCCCCAGGGGCAGGGGGGCT GCCTCCTCCACAAgtgagtcactttcagggggtgattgggcagaaggggtgcaggatgggctggtagcttccgcttggaa ttgctctgtcgcccaggctggagtgctgtggcatgatcttgcctcactgcaacctccacctcccaggttcaagcgattct agggtttcgccgtgttggctaggctggtctggaattcctgacctcaggtgatccacccgcctcggcctcccaaagtgctg ggattacaggcgtgagccactacgcccagccctgtttcagtctttaactcgcttcttgtcataagaaaaagcatgtgagt tttgaggggagaaggtttggaccacactgtgcccatgcctgtcccacagcagtaaagtcacaggacagactgtggcaggc ctggcttccaatcttggctctgcaacaaatgagctggtagcctttgacaggcctgggcctgtttcttcacctctgaatta gggaggctggaccagaaaactcctgtggatcttgtcaactctggtattcttagagactctgtttgggaaggagtcctgag ${\tt ccatttttttttttttttttttatcaggaagaggagtgcttatgatagctctctgctgcttttatcagcaaccaaattgc}$ aggatgaggacaagcaattctaaatgagtacaggaactaaaagaaggcttggttaccactcttgaaaataatagctagtc caggtgcggggtggctcacacctgtaatctcagtattttgggatgccgaggtggactgatcacctaaggtcaggagttcg aaaccagcttggccaatgtggcgaaaccctgtctctactaaaaattcaaaaattagccaggcatggtggcacatgcctgt aatcccagttacttgggaggctgaagcaggagaattgcttgaacctgggaggtggaggtcgcagggagccaaaattgcgc cactgtactccagcctgagcaacacagcaaaactccatatcaaaaaataaaatgaataaaataacagctaatctagtcat cagtataactccagtgaacagaagatttattaggcatagtgaatgatggtgcttcctaaaaatctcttgactacaaagaa tctcatttcaatgtttattgtttagatgttcagaataaattcttgggaaagaccttggcttggtgtaagtgaattaccag tgccgagggcagggtgaaccaagtctcagtgctggttgactgagggcagtgtctggggacctgtagtcaggtttccggtca ${\tt cactgtggacatggtcactgttgtccttgatttgttttctgtttcaattcttgtctataaagacccgtatgcttggtttt}$ catgtgatgacagAGAAAACAAAACACTGCAGATATCCTTCAGGACCTGACAGGAAGAACATTTCGGATTATCTGGTGA AGACGTATGTGCAGATCATAGCCAAAAGgtgactttttactaaacttggcccctgccttattattactaattagaggaat taaagacctacaaataacagactgaaacagtgggggaaatgccagattatggcctgattctgtctattggaagtttagga tattatcccaaactagaaaagatgacgagagggactgtgaacattcagttgtcagcttcaaggctgaggcagcctggtct agaatgaaaatagaaatggattcaacgtcaaattttgccac

Figure 12K

SEQ ID NO: 25
Genomic contig containing ABC1 exon 32:_

Figure 12L

SEQ ID NO: 26 Genomic contig containing ABC1 exon 33 to 36:

 ${\tt gctttatagagtttctgcctagagcatcatggctcagtgcccagcagcccctccagaggcctctgaatatttgatatact}$ $\verb|ttgtactttccccccaaaccagattcccgaggcttcttaaggactcaaggacaatttctaggcatttagcacgggactaa|$ a a agg tott agaggaa at a agaag c g c caa a accat c tott t g cact g tatt t caa c ccat t t g to c tott g g g t t t t g a g considerable and g considerable ${\tt aggaacaggtgggactggggacagaagagttcttgaagccagtttgtccatcatggaaaatgagataggtgatgtggcta}$ tctctgggcagagcagacgcaggcccctataatagccctcatgctagaaaggagccggagcctgtgtataaggccagcgc agcctactctggacagtgcagggttcccactctcccaactccccatctgcttgcctccagacccacattcacacagagccactgggttggaggagcatctgtgagatgaaacaccattctttcctcaatgtctcagctatctaactgtgtgtaatcaggccaggtcctccctgctgggcagaaaccatgggagttaagagattgccaacatttattagaggaagctgacgtgtaact tctgaggcaaaatttagccctcctttgaacaggaatttgactcagtgaaccttgtacacactcgcactgagtctgctgatgatactgtgcaccccactgtctgggttttaatgtcaggctgttettttagGTATGGCGGCTTTTCCCTGGGTGTCAG TAATACTCAAGCACTTCCTCCGAGTCAAGAAGTTAATGATGCCATCAAACAATGAAGAAACACCTAAAGCTGGCCAAGg taaaa tatctatcgtaagatgtatcagaaaaatgggcatgtagctgctgggatataggagtagttggcaggttaaacggatcacctggcagctcattgttctgaatatgttggcatacagagccgtctttggcatttagcgatttgagccagacaaaact gaattacttagttgtacgtttaaaagtgtaggtcaaaaacaaatccagaggccaggagctgtggctcatgcctgtaatcc tag cactttggg agg ctg aag cgg gtgg at cacttg agg tcag gag ttcg aga ccag cctg gcct acat gac aaaccccgtatctactaaaaatacaaaaattagctgggcttggtggcacacacctgtaatcccagctacttgggaggctgaggca ggagaattgcttgaaccctgtaggaagaggttgtagtgagccaagatcgcaccgttgcactccagcctgggcaacaagag caaaactccatctcaaaaaaacaaattaaatccagagatttaaaagctctcagaggctgggcgggtggcttacacctgtt $\verb|ctgtctctgctaaaaacatagaaaaattagccgggcatggtggcgtgcgctgtaatcccagctactcgggaggctgagg$ tgagagaattrcttgaacccgggaggcggaggttgcagtgagcccagattgcaccactgcactccagcctgggcgacaga taggacctgataagtactcacttcatttctctgtgtctcaggtttcccatttttaggtgagaattaaggggctctgataaaacagaccctaggattgtggacagcagtgatagtcctagagtccacaagtctgcttttgagtgatgggcccatgtatctg $\tt gcacatctgcaggcagagcgtggttctggctcttcagatgatgccggtggagcactttgaggagtcctcaccccaccgtg$ at a accaga catta a a atcttggggctttgcatcccaggatttctctgtgattccttctagacttgtggcatcatggcagggtagtggcattgctcttcacagggccgtcctgttgtccacaggttccagattgactgttgccccttatctatgtgaaca $\tt gtcacaactgaggcaggtttctgttgtttacagGACAGTTCTGCAGATCGATTTCTCAACAGCTTGGGAAGATTTATGAC$ ${\tt AGGACTGGACACCAGAAATAATGTCAAGgtaaaccgctgtctttgttctagtagctttttgatgaacaataatccttatg}$ $\verb|ttcctggagtactttcaactcatggtaaagttggcaggggcattcacaacagaaaagagcaaactattaactttaccag|$ tgaggcagtacggtgtagtgtagtgattcagagaatttgctttgccaccagacataccaggtaaccttgactaagttact taacctatctaaacctcagttycctcatctgtgaaatggagacagtaatcatagctatttccaaactgttgtgagaattcaatgagttaaaggtataaggtcctcaccacagcgcctgcccacatagtcagtgatcactatgtcctgaacactgtaatta TAACAAGGGCTGGCATGCAATCAGCTCTTTCCTGAATGTCATCAACAATGCCATTCTCCGGGCCAACCTGCAAAAGGGAG ${\bf AGAACCCTAGCCATTATGGAATTACTGCTTTCAATCATCCCCTGAATCTCACCAAGCAGCAGCTCTCAGAGGTGGCTCTg}$ taagtgtggctgtgtctgtatagatggagtggggcaagggagagggttatggagaaggggagaaaaatgtgaatctcattgtaggggaacagctgcagagaccgttatattatgataaatctggattgatccaggctctgggcagaagtgataagtttac gaattggctggttgggcttcttgaactgcagaagagaaaatgacactgatatgtaaaaatcgtaacatttagtgaattca

tataaagtgagttcaaaaattgttaattaaattataatttaattataagtgtttaatcagtttgatttgtttaaaaaacca gtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgaagtttaaagccaggatgagctagtttaaagtatgcagcctttggagtc at a cagatet gggttt gaatet ggtetetaaaett tat agat gat at taaat gag geag tte at gtaaat t geeaagcccagcactcagcacagagttgatatttcacacacattagatacctttcctgtatgtggagcatggcagttcctgtttc tgctttactcctacaggatactaatataggacactaggatctttataccaagaccccatgtaatgggcttatgagaccat tcttcttataaaaatctgacagaatttttgtatgtgttagatcaataggctgcatactgttattttcaagttgatttaca gccagaaatattaatttatttgagtagttacagagtaatatttctgctctcatttagttttcaagccccactagtccttt gtgtgtgaaaatttacaacttactgctcttacaaggtcatgaacagtggaccaaagtgaatgccattaaccactctgact, tccttcattagttttattgtgacagtggactcttttgacctcagtaataccagtttggcatttacattgtcatattttta gacttaaaaatgatcatcttaaccctgaataaaatgtgtctggtgaacagatgtttttccttggctgtgcctcagatatc tctgtgtgtgtgtgtgtgtttgtctgtgtgtccatgtcctcactgattgagccctaactgcatcaaagacccctca gattttcacacgctttttctctccagGATGACCACATCAGTGGATGTCCTTGTGTCCATCTGTGTCATCTTTTGCAATGTC CTTCGTCCCAGCCAGCTTTGTCGTATTCCTGATCCAGGAGCGGGTCAGCAAAGCAAAACACCTGCAGTTCATCAGTGGAG TGAAGCCTGTCATCTACTGGCTCTCTAATTTTGTCTGGGATATGgtaaggacacaggcctgctgtatctttctgatgtct qtcaqqqccatqqattqatatqqataaqaaaqaaaqaqctctqqctatcatcaqqaaatqttccaqctactctaaaqatq tatgaaaaagaaatagccagaggcaggtgatcactttcatgacaccaaacacagcattgggtaccagagttcatgtcaca ccagagggaaaattctgtacacaatgatgaaaattaataccactaccacttaagttcctatgtgacaactttcccaagaa tcagagagatacaagtcaaaactccaagtcaatgcctctaacttctctgatgggttttaacctccagagtcagaatgttc tgtttttgtgccasccacaatatattgcttctatttggaccaatatgggggatttgaaggaattctgaagttctaattat ctaattcttctcccaccgaacaagtccctggatatttaaaaataactctcatactctcatttaacctgagtattacccag ataagatgatatatgagaatacaccttgtaacctccgaagcactgtacaaatgtgagcaatgatggtggagatgatgatg agatetttgetgtttataccaageeeettagaetgtgteaetettetgateeggttgteettgtatggeeatgetgtata ttgtgaatgtcccgttttcaaaagcaaagccaagaattaaccttgtgttcaggctgtggtctgaatggttatgggtccag agggagttgatctttagctcacacttctattactgcagcacaaagattttgcatttttggaaggagcaccgtcttactggc aacttagtggtaaaccaaaacctccatttcacacaaatgattgtgaaattcgggtctccttcattctatacaaattcatt ttactcctttcagtaaacacagactgagtgctgtgtgtctgacttatgccaggcataggtgattcagagatgaaaggtca tgtcttcatctaagttgttgataaacacatcaagtaggattggactgaggcagagccctgtagtctgaagctgcagttct tctagcggctgacaagccccactatcacttccctgctggtgctttgctctgccagctgtgaattctcataattgtcctatcqtcaaqtctttatttctgcattttactgcttgatacactqtcaggacagactttaaaaattattctcaqtqcgatgaaac aattctgacattcatgttatgagcagttacctcataaatagattacatg

Figure 12M - (2)

SEQ ID NO: 27
Genomic contig containing ABC1 exon 37 to 41:

aaattactctgactgggaatccatcgttcagtaagtttactgagtgtgacaccttggcttgactgttggaaagacagaaa gggcatgtagtttataaaatcagccaaggggaaaatgcttgtcaaaatgtattgtcgggtattttgattaatagtttatg tggcttcattaattcagagttactctccaatatgtttatctgccctttcttgtctgataatggtgaaaacttgtgtgatg cattgtatatttgatttaggggtgaactggatgtctttgttttcacttttagTGCAATTACGTTGTCCCTGCCACACTGG TCATTATCATCTTCATCTGCTTCCAGCAGAAGTCCTATGTGTCCTCCACCAATCTGCCTGTGCTAGCCCTTCTACTTTTG CTGTATGGgtaagtcacctctgagtgagggagctgcacagtggataaggcatttggtgcccagtgtcagaaggagggcag ggactctcagtagacacttatcttttgtgtctcaacagGTGGTCAATCACACCTCTCATGTACCCAGCCTCCTTTGTGT TCAAGATCCCCAGCACAGCCTATGTGGTGCTCACCAGCGTGAACCTCTTCATTGGCATTAATGGCAGCGTGGCCACCTTT GTGCTGGAGCTGTTCACCGACAATgtgagtcatgcagagagaacactcctgctgggatgagcatctctgggagccagagg acagtgtttaattgtgatcttattccacttgtcagtggtattgacactgctgactgccttgtcctgtcttcagagtctgt cttccctgagaaggcaaagcacctttctttcttgctgtgccttacattttgctggtcaagcctttcagtttcttttgaca gttttttttacttcttttttcaatgttgctcttaccaagagtagctcctctgccttccactttacacatgagagct gggcgacgcattcagtcctaaggcttttaccatcacctctcttggtgtttttattgtcatctctaagatcaatgccttta gccttgatcataaccttgaactctaatctcaaattctcacttgcctagtggattgctccatttagatagtatatagatac ${\tt cccaacctggatatgtcctagttttctttccccttggaacttaatgcttttcttgccatccctgtcacactcagtggcac}$ actggttatgttgtcagttcttccaggtatggacctctaaaataaggcttcctctccattccggttgtcattgcctttgt ${\tt ccaaacacagcacacaaggccttttacagttgcacaactcttcctgtccatacccaccaccaccctttcccagctgtaagc}$ ttcagatgagttgcctccaaccaccatgctcctgtaggcctggcttgaaatgcccttcttctgtcacagggtctggtagt atatcccttgcccttcaagatttagctaaaatgtgaagctttccttacctgctgggaggtgttctctcttttctctgtgc tctcagagtccttagtccatgcctccagtacaacgtacatccacttacatggtaatttcctgtttacatacttttcctac teggagtggagtctgtttcttaataattttgcctctcccatgccctagcacagtgcatccagcgtatagccccttattcagttggtagatatttggccactgttgccttgtgggatcataagttctgatgtatttgagaagaatttctaaaattctgaca aaatcctgaaactcaaatattgacccagacatgagcaatttgcttttcaaatgctaagggatttttaatggatttgcttt aattaaatctagcctgtttctaagctttattcattatttctccatactcagagcatttctccagattttctaaagaatag aattttattgctacatatcatcagctatgcctgctgctatttaattggtatctgaattaaaaggtctggtttgtccctag CGTGTTCTTGATCTTCCCACATTTTTGCCTGGGACGACGCGCTCATCGACATGGTGAAAAACCAGGCAATGGCTGATGCCC TGGAAAGGTTTGgtgagtgaagcagtggctgtaggatgctttaatggagatggcactctgcataggccttggtaccctga actttgttttggaaagaagcaggtgactaagcacaggatgttcccccacccccatgcccagtgacagggctcatgccaac acagctggttgtggcatgggttttgtgacacaaccatttgtctgtgtctctgatagcattgagaaaagtgaaagggcagt aagtcaaaccataactttgagaattaggtgatcagggaatcagaaggaaagatgcaaactttggctcttttaggcgaatc atgtgcctgcagatgaggtcatttattatcttttacacagtctataaaattataatgtattacatctttttctaccttta ${\tt gaatggttaaaaaatatttctccggtagccatatgattattattcatccattagataatatagtcaaatgggccatgttat}$ ttactgttcatagaagaggggctttttgcaacttgggctacaaaggagatatgtaaggaatttaaggaatggttacatggaactagatttaattgaatctagtggtttaattgattcactaggatatatgctactgaaaggggaatctgcttaaagtgct aaaaggatttttggcatgtctcattaaaaaaagaaatactagatatcttcagtgaagttacaaatcgaatacacattggc tctgaaattctgattgatactgggtcataaaaagttttcccaaatcagacttggaaagtgatcactcttttttcccaaatcagacttggaaagtgatcactctttttttactctt $\verb|tttccttgtcatgggtgatagccatttgtgtttattggaagatcggtgaattttaaggaacataggcccaaatttgagg$ aagggccatggtttttgatccctccattctgaccggatctctgcattgtgtctactagGCGAGAATCGCTTTGTGTCACC ATTATCTTGGGACTTGGTGGGACGAAACCTCTTCGCCATGGCCGTGGAAGCGGTGGTGTTCTTCCTCATTACTGTTCTGA

Figure 12N - (2)

SEQ ID NO: 28 Genomic contig containing ABC1 exon 42 to 45:

ttttaaaatacctgcaatacatatatgttgaatagatgaaaaattatgtagatgataatgaatgatacggttctaaaa agacaggttaaaaagtaagttcacttttattttgagcttcagaatcattcagaagccagtcgccacaaacgcagaccaag ${\tt gctcttggcacatcaaatatgcctatggcttagggttattgacaagtcttatgttgcagtgtatgtggtttatagtcctg}$ ${\tt GGAAGCGGAAGCCTGCTGTTGACAGGATTTGCGTGGGCATTCCTCCTGGTGAGGtaaagacactttgtctatattgcgtt}$ tgtccctattagttcagactatctctacccaatcaagcaacgatgctcgttaagaggtaaaagtggattttaaaggcttctgtatttatgccaggatggagcaattagtcatcgagaagagggaccctgtatgtcaagagaatgatttcagagaatccaatacaatttaagaaaaagcatggggctgggcgcagtgattcactcctgtaatcccagcactttgggaggccgaggtggg cggactcacgaggtcaggagattgagaccatcctggccaacatggtgaaaccccatctctactataaatacaaaaattag ctgggcatagtagtgcattcctgtagtcccagctactcgggaggctgaggcaggagaattgcttgaacctaggagggga ggttgcccagattgcgctgctgcactccagcctggtgacagagtgagactcatgtcaacaacaaaaacagaaaaagcacg ${\tt cacatctaaaacatgcttttgtgatccatttgggatggtgatgacattcaaatagtttttaaaaaatagattttctcctt}$ tctggtttccgtttgtgttcttttatgcccttttgccagagtaggtggtgcaatttggctagctggctttcattactgtt tttcacacattaactttggcctcaacttgacaactcaaataatatttataaatacagccacacttaaaatggtcccatta tgaaatacatatttaaatatctatacgatgtgttaaaaccaagaaaatatttgattcttctctgatatttaagaattgaa ggtttgaggtagttacgtgttaggggcatttatattcatgtttttagagtttgcttatacaacttaatctttccttttca gTGCTTTGGGCTCCTGGGAGTTAATGGGGCTGGAAAATCATCAACTTTCAAGATGTTAACAGGAGATACCACTGTTACCA GAGGAGATGCTTTCCTTAACAAAATAGgtgagaaaagaagtggcttgtattttgctgcaaagactttgttttaattta tttaaagaaataggttgttatttttgattacagtggtatttttagagttcataaaaatgttgaaatatagtaaagggtaaagaagcacataaaatcatccatgatttcaatatctagagataatcacaatttacatttcctttcagtctcattctcttct $\verb|tttaacagctttattcaggtataatttacatacaatataatttgcttgtttttaagagtataatttagtgatttttggt|$ aaattgagagttttgcaaccatcaccacaatccagttttagaacttttccatcaccccacatctgtcttatatacacata $\verb|tttcccagtgggttacatttcctaagatgtggaattttacattgctacataaaatccccctatgtacatgtacctataat|$ ttatttaataaattccttataaatgttggacacattagtttccatttttcactatgtaaatatgtccctgtatacatcttttattatttcctcaggaacaattcctacaaagtaaattgccctctctaaagagcatacaaattgactgagccaccgttag ${\tt gccattttctgagactgcacaggtcacaaagcaatctgatctttgggaatacagctacattttataggcttcttagataa}$ ggctggagagcaatggcgcgaccttggctcactgcaacctccgcctcccaggttcaagcgattctcctgcctcagcctcc gttggccagactggtctcgagctcctgacctcaggtgatccacctgcctcagcctcccaaagttctgggattacaggcat gagccactgcgcccggcttctctggacttattatgtggagagatagtacaaggcagtggctttcagagttttttgaccat gaccgttgtgggaaatacattttatatctcaacctagtatgtacacacagacatgtagacacatgtataacctaaagttt cataaagcagtacctactgttactaattgtagtgcactctgctatttcttattctaccttatactgcgtcattaaaaaag tgctggtcatgacccactaaatttatttcccaaaccactaatgaacaatgactcacaatttgaacacactggacaggggg atagccaataaaattgaaaagagcaaggaaattaatgtattcatgatctcctctcctgtctcttacatttttgcagtagc aatgtaaaggaatcctaagagaacagacattctgggaatagcaggcctagcgctgcacaactgctttcctaggcttgctc ctagtaccaagctcctgacgcatatagcagtggcagtaataaccagcccatagtaaggtttgtcacagggactggttgta agaactgatttgrttggtatagctgtgagggcctggcacggtgtccacgtgtgcctcaatcctaattctgaaaaaggctggaggtgcagtcatcagtctggaacgtgaacactgaacttctctcacatgtgattcttcacttgactggcttcatagaacc ${\tt ccaaagccacccaccaccaccactaaattgtgtctctaggttctgtgttgctcacactcaaaatttctgggccttctcatt}$ tggtgcatgtgaatggtgcatatgagtgaagtctaggatggggccttagcgttaaagccctggggtagtgtgactgagat tgttggtaaagaatgtgcagtggttggcatgacctcagaaattctgaaatgggactgcacctgcagactgaagtgttcag

Figure 120 - (1)

agagecagggaggtgcaaggactgggggagggtagaggcaggaaccetgcctgccaggaagagctagcatcctggggggcag aaaggctgtgctttcaagtagcagcagatgtattggtatctttgtaatggagaagcatactttacaggaacattaggcca gattgtctaaccagagtatctctacctgcttaaaatctaagtagttttcttgtcctttgcagTATCTTATCAAACATCCA <u>TGAAGTACATCAGAACATGGGCTACTGCCCTCAGTTTGATGCCATCACAGAGCTGTTGACTGGGAGAAGACACGTGGAGT</u> TCTTTGCCCTTTTGAGAGGAGTCCCAGAGAAAGAAGTTGGCAAGgtactgtgggcacctgaaagccagectgtctccttt ggcatcctgacaatatataccttatggcttttccacacgcattgacttcaggctgtttttcctcatgaatgcagcac --aaaatgctggttctttgtatctgctttcagggtggaaacctgtaacggtggtggggcagggctggggtgggcagagaggga gtgctgctcccaccaccacgagtcccttctccctgctttggctcctcaccagttgtcaggttatgattatagaatctagtc ctactcagtgaaagaactttcatacatgtatgtgtaggacagcatgataaaattcccaagccagaccaaagtcaaggtgc ttttatcactgtagGTTGGTGAGTGGCCGATTCGGAAACTGGCCCTCGTGAAGTATGGAGAAAAATATGCTGGTAACTA TAGTGGAGGCAACAAACGCAAGCTCTCTACAGCCATGGCTTTGATCGGCGGGCCTCCTGTGGTGTTTCTGgtgagtataa ctgtggatggaaaactgttgttctggcctgagtggaaaacatgactgttcaaaagtcctatatgtccagggctgttgtat. gattggcttgtcttcccccagggacagcagcagcatcttggaaaagcagagggaagcttctcccttggcacacactgggg tggctgtaccatgcctgcagatgctcccaaatagaggcactccaagcactttgtttcttagcgtgattgaggctggatat gtgatttgatctttctctggaacattctttctaatcatctttgtgttcattccctgaaaatgaagagtgtggacacagct ttaaaatccccaaggtagcaactaggtcatagttccttacacacggatagatgaaaaacagatcagactgggaagtggcc cttgaccttttttcttctgtagataagagcattgatgttattacgggaagaagcctttgaggcttttatgtattccacct ggaatttcaccccaatcttatactgacttcaatagaggtttcagacaaaaagttgttttgtat

Figure 120 - (2)

SEQ ID NO: 29

Genomic contig containing ABC1 exon 46 to 49:

ngccnngttnaaaangaaaatttnnnnnaaattnaannttannggngnnntttccccagaaaaaacnaaaangatttccn cccnggggggncccccnantcnaaaaggccccncttntttgnggngagggaaagntttttttggaatttttaatttttgg tcccccaaaacctattattgagaatttaattacataaaaaagtactcagaatatttgagtttcctgcatcaataagacat ttataataatgaccttgtttacaaatgaatttgaaagttactctaattctttgattcatcaagaaataactagaatggca agttaaaatttaagctgtttcaaagatgcttctgcatttaaaaacaaatttatctttgatttttttccccccagcaaat aagacttattttattctaattacagGATGAACCCACCACGGCATGGATCCCAAAGCCCGGCGGTTCTTGTGGAATTGTG CCCTAAGTGTTGTCAAGGAGGGGAGATCAGTAGTGCTTACATCTCATAGgtccgtagtaaaagtcttgggttcctcactqt gggatgttttaactttccaagtagaatatgcgatcattttgtaaaaaattagaaaatacagaaaagcaaagagtaaaacaa ttattacctgaaattatatatgcatattcttacaaaaatgcaagcccagtataaatactgctctttttcacttaatatat tgtaaacattattccaagtcagtgcatttaggtgtcatttcttatagctggatagtattccattaggatatactcttatt taactattcccccttttgtagacatttggattatttccaacttgttcacaattgtaaacaccactacactgaacagcatc atccctatatccacatgtacttgtaacagaatacaattccctaggaagctggaatgctggaagtcatggtgatgttctca tggttacagagaatctctctaaaactaaaacctctttctgttttaccgcagTATGGAAGAATGTGAAGCTCTTTGCACTA GGATGGCAATCATGGTCAATGGAAGGTTCAGGTGCCTTGGCAGTGTCCAGCATCTAAAAAAATAGgtaataaagataattt ctttgggatagtgcctagtgagaaggcttgatatttattcttttgtgagtatataaatggtgcctctaaaataaagggaa ataaaactgagcaaaacagtatagtggaaagaatgagggctttgaagtccgaactgcattcaaattctgtctttaccatt tgctatagatgaaatgaaaaaatttacatgtgccagtactggtgagagcgcaagctttggagtcaaacacaaatgggtt tgcatcctggccctaccaattatgagctctgagccatgggcaagtgactaactccctgggcctcagtttctctgtaacat ctgtcagacttcatgggtccaggtgaggattaaaggagatcatgtatttacagcacatggcatggtgcttcacataaaat aagtatttagtaaatgataactggttccttctctcagaaacttatttctgggcctgccaggggccgccctttttcatggc acaagttgggttcccagggttcagtattcttttaaatagttttctggagatcctccatttgggtattttttcctgctttc ${\tt aggtttggagatggttatacaatagttgtacgaatagcagggtccaacccggacctgaagcctgtccaggatttcttttgg}$ <u>ACTTGCATTTCCTGGAAGTGTTCYAAAAGAGAAACACCGGAACATGCTACAATACCAGCTTCCATCTTCATTATCTTCTC</u> TGGCCAGGATATTCAGCATCCTCTCCCAGAGCAAAAAGCGACTCCACATAGAAGACTACTCTGTTTCTCAGACAACACTT GACCAAgtaagctttgagtgteaaaacagatttacttctcagggtgtggattcctgccccgacactcccgcccataggtc caagagcagtttgtatcttgaattggtgcttgaattcctgatctactattcctagctatgctttttactaaacctctctg aacctgaaaagggagatgatgcctatgtactctataggattattgtgagaatttactgtaataataaccataaaaactac catttagtgagcacctaccatgggccaggcattttacttggtgcctaatcctatttaaattagataaaaaagtaccaaat tggatgactgagcagttggtgatgtaggggtgggggggatatagaaagtcagtttttggccgggcgtggtggctcatgc ctgtaatcccagcactttgggaggctgaggagcaggcagatcatgaggtcaggagatccagataatcctggccaacaggg tgaaaccccgtctctactaaaaatacaaaaattagctgggcatggtggtgcgcacttgtagtcccagctacttgcgaggc tgaggcaggagaattgctcgaacccaggaggtggaggttacagtgagccaaggtctcgccactgcactccagcctgggga çagagcaagaccccatttcaaggggggaaaaaaagtctattttaagttgttattgctttttcaagtattcttccctcc ttcacacacagttttctagttaatccatttatgtaattctgtatgctcctacttgacctaatttcaacatctggaaaaat agaactagaataaagaatgagcaagttgagtggtatttataaaggtccatcttaatcttttaacagGTATTTGTGAACTT TGCCAAGGACCAAAGTGATGATGACCACTTAAAAGACCTCTCATTACACAAAAAACCAGACAGTAGTGGACGTTGCAGTTC AGAGGAACTAGACTTTCCTTTGCACCATGTGAAGTGTTGTGGAGAAAAGAGCCAGAAGTTGATGTGGGAAGAAGTAAACT GGATACTGTACTGATACTATTCAATGCAATGCAATTCAATGcaatgaaaacaaaattccattacaggggcagtgcctttg tagcctatgtcttgtatggctctcaagtgaaagacttgaatttagttttttacctatacctatgtgaaactctattatgg taattcatcaagtaatcatggccagcgattattgatcaaaatcaaaaggtaatgcacatcctcattcactaagccatgcc

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Figure 12P - (2)

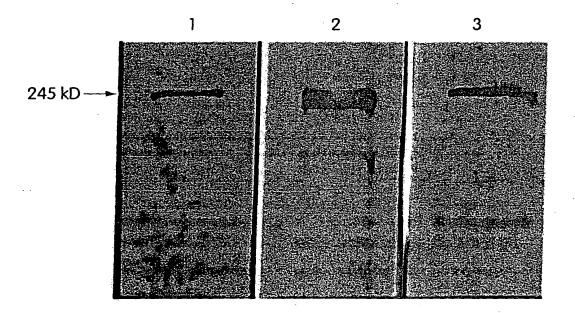


Fig. 13

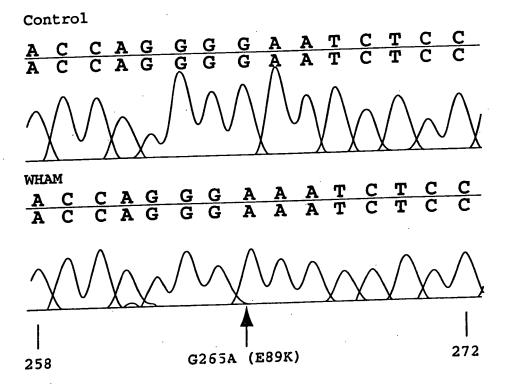


Fig. 14

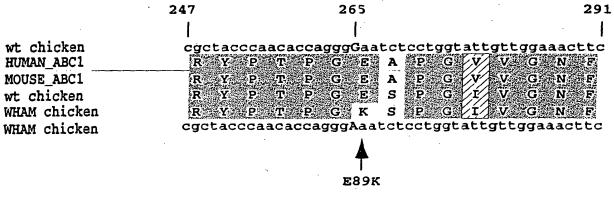


Fig. 15

Sequence Strand Length	12 Complement 13 Lead 14 Lead 14 Complement 13 Lead 12 Complement 13 Complement 13 Complement 15 Complement 16 Complement			
Sequence	AGGTAAAAGTCA AGAGTAGAGGGCA ATGTCAAAGGGCA AGGCCAGCAGGGCC AGGCCAGCAGGGC AGGCCAGAAGGGA ATGCCAAGGTCA GGGCCAAGGGTCA AGGTAATGAGGACAA	60000000000000000000000000000000000000	AGGGTCA TAGGGTCA TAGGGTCA TAGGGTCA AGGGTCA AAGGTCA	ACACTG TCATGTG TCATGTG TCATGTG TCACTTG TCAGTG TCAGTG
Location in SEQ ID No. 14	1997 - 2006 21150 - 2006 21150 - 21161 4126 - 21161 5006 - 50087 6006 - 6015 7221 - 75483 75568	11111111111111111111111111111111111111	4444444	473 5376 5376 5376 5376 558 1008 1108 1108 11108 11108 11110 11108 111110
•	1 PPRE 2 PPRE 4 PPRE 5 PPRE 9 PPRE 9 PPRE 10 PPRE 10 PPRE	1109877888878888788888888888888888888888	1 ROR (retinoic acid receptor related) 2 ROR retinoic acid receptor related) 3 ROR retinoic acid receptor related) 4 ROR retinoic acid receptor related) 5 ROR retinoic acid receptor related) 7 ROR retinoic acid receptor related) 8 ROR retinoic acid receptor related)	1 SREBP-1 or "E box" 3 SREBP-1 or "E box" 4 SREBP-1 or "E box" 5 SREBP-1 or "E box" 6 SREBP-1 or "E box" 7 SREBP-1 or "E box" 8 SREBP-1 or "E box" 9 SREBP-1 or "E box" 10 SREBP-1 or "E box" 11 SREBP-1 or "E box"

Lead Complement Lead Complement Complement Lead	Lead Complement Lead Lead Lead Complement	Complement Complement Lead Lead Complement Lead	Complement Lead Complement Complement Complement Lead	PPBBB	Complement Complement Lead Lead Complement	Complement Lead Complement Complement Lead Complement
		·····				